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#333

JULY 2019



Here's to the fools who dream, crazy as they may seem

The game industry, and those who observe and report on it, are obsessed with what's next. As we put this issue to press, we are just opening our schedules for E3, where it is rumoured the next generation of videogame hardware will appear. Already this year, Google has outlined its own vision of the future of games through Stadia. Yet this is a sort of progress by consensus. Of course the platform holders will continue to make new platforms. Streaming has been promised as the future for years, and Google's endeavours have been an open industry secret for just as long.

We are far more interested in those who identify opportunities for progress that defy the status quo, rather than being defined by it. In *An Audience With* this month, former *Uncharted* scribe Amy Hennig hints at her vision for the future of storytelling in games. She may have made her name by making blockbusters, but as she embarks on the next phase of her career, Hennig is thinking very differently. The opportunity Stadia, and the other realtime streaming services that will follow it, represents is the access they provide to people who do not consider themselves as game-players. Reaching this group will not be easy. Hennig believes we need to reexamine input devices, runtime, difficulty and more if narrative games are to reach a higher plane.

That's certainly forward thinking. So is our cover star, though it might not look like it at first. If you've played one of the games Hennig singles out as getting videogame storytelling right, you've seen Playdate before: it's sitting, innocuously, on a desk about three-quarters of the way through *Firewatch*, a game published in 2016 by Playdate's maker, Panic. It's been thinking about this for a while, in other words. The final result is at once retro and futuristic, a classic sort of videogame console that challenges how we think about design, distribution and ownership. It's a celebration of those who dare to think a little differently. The world-exclusive story of a console very few people saw coming begins on p56.



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Moving parts

How British publisher Excalibur is driving vehicle simulation in a new, **emotionally charged direction**

Uncle Lütfi is a fixture of the passenger seat in *Jalopy*, the road-trip game – a font of unsolicited personal history as you drive through East Germany on the eve of reunification, and a source of cash when you’ve emptied the wallet in the glovebox to buy spare tyres. But developer **Greg Pryjmachuk** considered removing him entirely, such was the personality of the car itself. The Laika 601 Deluxe, a fictionalised take on the iconic Trabant, splutters and rattles as if it’s fuelled by the nasty cigarettes that line the shelves in every petrol station. It does zero to 60 in 22.5 seconds, has good days and bad, and requires constant maintenance. In other words, it’s the most relatable character in driving simulation.

The simulation genre is undergoing something of a refit right now, but unlike the Laika, it’s not out of necessity. Rather, the breakout success of games like *Euro Truck Simulator 2* on Steam has awakened the field’s developers and publishers to the possibilities of new configurations. A new audience has come to appreciate not only the pull of the open road, but the bond between driver and rig, a relationship as emotional as it is mechanical. It’s from this connection that the road-trip game has emerged, and is now exploring a very different side of a well-worn genre.

Euro Truck publisher Excalibur Games has pulled to the front of this developing style, backing *Jalopy* through early access until its launch last year, and publishing the forthcoming *Road To Guangdong*. In the latter, you accompany a young graduate, her

NEW MODEL Darby doesn’t know where road-trip games might go next, but has concerns. “I love the fact that at the moment all the existing games are quite different in execution and focus,” he says. “I worry that if the genre becomes popular we might start to see the same kind of tick-box, feature-matching mindset which plagues many genres creep in and homogenise it.” In a field so defined by the local flavour and function of its vehicles, however, perhaps new settings alone will be enough to provide endless variety. There are many seemingly identical Laikas in *Jalopy*’s world, after all, but each one is made unique by its particular configuration of parts. Maybe the same can be true for road-trip games.

elderly aunt and their battered family car Sandy on a long journey across the eponymous Chinese province. The game was born from a conversation between designer **Alex Darby** and Excalibur development director Steve Stopps, which revealed a gap in the publisher’s portfolio for 2019 and a perceived appetite for more ‘slow driving’ games. “I pitched an idea I had for years which fitted into that slot,” Darby says. “I really wanted to make a game which might be able to feel like the equivalent of a Wes Anderson film. The road-trip genre just happened to come along at the right time.”

Just as PC audiences have begun to wonder whether there might be more to vehicle simulation, these driving-game developers have been on a parallel creative journey. After years of work in the genre, Darby considered it “really lovely to just pootle about, taking in the scenery and not worrying about racing lines or optimal braking points”. And after working on five iterations of Codemasters’ *F1* series, *Jalopy* developer Pryjmachuk was keen to swap out some of the parts too. “F1 is a sport in which not much action actually takes place on the track,” he tells us. “The wins are made in the garage and in the pit lane. Considering this, I thought, could you remove the competitive nature and adapt the genre to take on a more zen approach?”

Euro Truck was a big inspiration for *Jalopy*, and for Excalibur the throughline

from its simulation portfolio was clear. In its games about travelling, the one constant had been the truck, which quickly became a character in itself. Moreover, the publisher knew its players, who adored the nitty-gritty and quirkiness of its sims. In *Flashing Lights*, for instance, you don’t just drive a police car, you ignite the engine and turn on the sirens first. Refuelling, replacing a fan belt, changing a tyre: these constant granular tasks, comparable to the grounding techniques of mindfulness, root you deeply in the worlds of *Euro Truck*,

Guangdong and *Jalopy*.

What’s more, when you’re looking so closely at handbrakes and carburettors, the specificity of those parts can become a powerful tool for storytelling. It’s not news to simulation developers that local machinery can evoke a particular time and place. In *Train Sim World*,

for instance, the electric whine and tight speed control of the S-Bahn’s Talent 2 reflect the pace of the metropolitan German commute, while the slow gear transitions of the armoured behemoth that takes you over Pennsylvania’s Sand Patch Grade are soothing and old-timey. On Steam, simulation sequels and expansions are often sold on the basis of their locations, and players tend to travel on virtual routes as close to their homes as possible, looking for familiar comfort.

The cars in road-trip games play to this potential. The very existence of a now-redundant carburettor in your



Jalopy is a game all about foreplanning. Hydroplaning is a risk, but fitting the Laika with off-road tyres could leave you with no cash for the motel



Laika dates *Jalopy* in the early '90s, at a point of major transition, and the rickety state of this communist symbol tells you more about the world passing by outside your window than Uncle Lüfi ever could. In *Guangdong*, the rusting vehicle at the core of the experience takes on a different meaning – this is the story of a 23-year-old who unexpectedly inherits a relative's restaurant. Every time she reignites the engine, she's a step closer to doing the same with the family bonds she's neglected. The in-car radio has just two channels: one representing protagonist Sunny's taste in '90s dance and rock, and the other accounting for aunt Guu Ma's classical leanings. It's your job to repair both the car and your relationship with your aged passenger.

Guangdong's writer, **Yen Ooi**, has not only made up for the team's deficit in their understanding of Chinese culture, but taken the genre in new directions. Her story advances the road-trip formula with dialogue – narrative puzzles and moral choices that protagonist Sunny navigates when she's out of the driver's seat. "Stories and road trips are both about getting from point A to point B," she says. "The only difference is in the expectation – when I'm on a road trip, a good one would be uneventful and smooth, whereas in stories, the more eventful, the more interesting the story might be." Ooi sees the car maintenance and story aspects of *Guangdong* as complementary, the yin and yang that bring balance to your emotional engagement with the game. Prymachuk, too, suggests that fixing up the Laika gives you important downtime in *Jalopy*'s story. "I like to have something to do with my hands while I think," he says.

Ultimately, it's the relationship between you and the vehicle that's the defining one in this genre. Prymachuk has never added an auto-repair option to *Jalopy*, despite frequent requests, since he believes streamlining away the problems would compromise your connection to the Laika. In *Guangdong*, Darby believes, your responsibility to keep Sandy running is key to the whole

premise. "You have to try to stop it breaking and so you automatically become invested in it," he says. "It's a bit like the Companion Cube was in *Portal*." Ooi points out that Sandy has been part of the Tong family longer than the protagonist has. The car has been collecting stories for decades, and brings security and familiarity thanks to Sunny's childhood memories of road trips with her parents. "If only it could talk!"

Darby expects that players will anthropomorphise Sandy, not just because its team has named it, but because the "acts of caring" required to keep this idiosyncratic vehicle going. The character they attribute to the car, he says, will depend on how they choose to drive it: "We don't have an explicit personality for Sandy."

Both sets of developers agree road trips are a gift for designers looking to provide players with a regular cadence of unpredictable adventure. "There's a lot you can do with the open road," Prymachuk says. "You can put anything in front of the characters and they're bound to come across it. You can organically force a big array of interactions." Road trips, according to Darby, are an ideal way to present stories that happen to the player, rather than rendering them a passive listener. "There are so many interesting stories to tell and places, people, and cars to tell them with, and so many interesting interactions among all that," he says. "I think it's a virtual certainty that I'll do more games in the road-trip genre."

Darby looks at the road trip as a powder keg of interpersonal drama, thanks to the proximity of a small group of people over a prolonged period. It's a storyteller's dream, since it allows for a forced, but believable thrashing-out of long-buried issues. "In the context of driving there's a shared burden of concentration, boredom and resignation

or commitment to going through with what you're doing," he says, "which almost necessitates the dropping of emotional barriers. I think the situation really lends itself to exploring deeper human truths, needs, or desires. I reckon maybe 75 per cent of the really important decisions I've made with my wife have been made on long car journeys – getting married, having a child."

Prymachuk isn't currently working on a follow-up to *Jalopy*, but would love to build a road-trip game again. For its part as publisher, Excalibur is dedicated to the genre, and plans to keep tinkering with the formula as new competitors enter the market. The question is whether Excalibur

and its collaborators have invented something completely new, or simply wrapped a new narrative foil around a tried-and-tested set of mechanics. But it's worth noting that other genres have been born the same way. When Fullbright made *Gone Home*, it removed the combat mechanics of its parent

genre, the immersive sim, in order to accentuate those that were about intimately interacting with the world around you. Firstperson narrative games, or walking simulators, have gone from strength to strength since.

Similarly, road-trip developers are taking the competition out of driving games – the elements that promote tension, frustration and exhilaration – to get at a different set of emotions. Namely, the potential for zen inherent in fiddling with a car you can't replace or update, but only repair. However the road-trip game develops, it'll be powered by that relationship between mechanic and machine. "There's an initial excitement from learning about this new entity in your life," Prymachuk says. "But the real reward comes after a bond forms between the two, from learning the faults and how to best work around them. It's a really positive thing: I know what's best here, and I know I can help." ■

Road trips are a gift for designers looking to provide players with a regular cadence of adventure



TOP Road-trip games on indie budgets have so far departed from the attempted photorealism of the simulation genre, aiming for a stylised verisimilitude instead. LEFT *Euro Truck Simulator 2* boasts a popular multiplayer mod, which has led to traffic jams, and in turn spawned a radio station that reports on the pile-ups plaguing its virtual roads

Test fight

CCP Games and Hadean team up to explore the outer limits of **massively multiplayer games**

The phrase '10,000-player deathmatch' – whether it fills you with excitement, dread or simply curiosity – is difficult to ignore. Creating one was the ambitious goal of Hadean, a London-based engineering company specialising in large-scale simulation. And at this year's GDC, with the tech demo *Eve: Aether Wars*, it hit it. The number of concurrent human players peaked at 2,379; including AI, the deathmatch topped out at 10,412 participants. A cumulative total of 3,852 human pilots battled alongside 10,422 AI pilots, bringing the full number of combatants to 14,274.

It's the sort of outlandish space fracas you might associate with, say, CCP Games. Lo and behold, the *Eve: Online* maker is involved, as evidenced by the tech demo's name. *Eve: Aether Wars* uses assets from CCP's games – some from *Eve: Online*, the majority from *Eve: Valkyrie*. But Hadean is doing the heavy lifting on the technical side. Powered by HadeanOS, Aether Engine is the world's first distributed gaming engine: it's able to partition large virtual spaces, remaining flexible enough to meet specific and ever-shifting needs. "You can basically allocate arbitrary amounts of CPU and computation to where it's needed," architect **Matthew Dobson** tells us. "So in a game world, you might have events that are happening, maybe some big bosses spawn and players are gravitating towards them. That part of the world now requires a lot more resources."

In Aether Engine, each processor core manages a chunk of data. Each chunk communicates with the others, so that players can move between them without

interruption – some even exist inside others, which is what allows developers to have games adapt on the fly. We're reminded of SpatialOS, Improbable's cloud-based solution to creating persistent large-scale multiplayer game worlds. But Hadean's differs in key areas. HadeanOS is natively run across multiple servers, and doesn't rely on middleware. "We're not trying to network and glue together a bunch of existing Unreal or Unity servers," Dobson says. "So when this needs more resources, it can spawn up new servers, and use cores and memory from those."

That approach attracted CCP CEO **Hilmar Veigar Pétursson's** attention in February of last year when Hadean visited CCP's offices. "Immediately we hit it off,"

he says. "And when I got into a little of what they were actually doing and how they were doing it, it reminded me a lot of an architecture we ourselves at CCP had on the design table in around 2010." CCP had decided not to build it – it was too early, and too much of a challenge to make a

generic solution – but Hadean's approach was so spiritually aligned that it made sense to support it.

Hypothetical talks began: what if they were to build an *Eve* game in the engine? "I made little requirement statements, which included 10,000 spaceships, without any time dilation, line-of-sight occlusion and all those kind of things," Pétursson says. "Out of that, we started to develop the concept of *Aether Wars*. We'd take spaceships from *Eve: Online*, make a technical prototype in Aether Engine, and see if we could get 10,000 people to join it – and what would break

if we did." Surprisingly little, it turned out. Flooded login servers delayed the event by about 30 minutes; otherwise, *Aether Wars* ran extremely well. Both Hadean and CCP are keen to repeat the success, and push the prototype even further.

There are numerous benefits of testing the limits of the virtual worlds we can build with this sort of technology, one of which is opening up possibilities for designers – rip the limiter off one variable, in this case scale, and developers may start to create entirely new genres. Hopefully, some of them will be good: we can't help but wonder whether anyone really wants a 10,000-player deathmatch. Indeed, one of Hadean's first ideas for this tech demo was a 10,000-person battle royale, before CCP pointed out that the first players to die would be receiving a raw deal. "Is it a fun thing to do?" Pétursson says. "I don't think it will be. But herein lies the opportunity. Who would think that going to Wembley stadium to watch 22 people argue over a ball would be fun?"

"Doing things together as a shared experience is something fundamentally human. Unfortunately, games lack the technical capabilities, and developers lack the imagination of what would you do in that setting, because it's not obvious – it requires a lot of experimentation." With CCP having field-tested this subject with *Eve: Online* for a decade, it's Pétursson's firm, and ones like it, that can lead engineers such as Hadean's in new directions. "I've never really seen CCP as 'just a computer-game company'," Pétursson says. "We want to explore the boundaries of human achievement on a large social scale. And every tool like the Hadean event, with which we can make it even more spectacular, seems like the path to explore around business." ■



The main challenges of the event weren't technological, but logistical: with thousands of players across multiple time zones, it was like herding cats



Hadean is using *Eve* assets, but Pétursson isn't worried about the issue of ownership should the tech demo become something bigger. "It's like, if there are two parents, who owns the baby?"



STEM CELLS

From life sciences to simulating sci-fi warfare on an unprecedented scale



Founded in 2015, Hadean has worked in financial technologies and life sciences – it collaborated with The Francis Crick Institute, using its simulation technology for cancer research. Hadean became interested in games, a space made up of difficult problems in which the firm could push its tech to find solutions at lower risk. It's similar to what DeepMind has been doing with AlphaStar (E330), although Dobson points out differences: "Starcraft is not representative of how people actually interact: it's cool, but we definitely want to think about AI safety in terms of a much more realistic simulated world."

Sea plus

A look ahead to this year's Develop conference unearths another coastal celebration of the UK game industry

As we often mention in these pages, the annual Develop: Brighton conference in the coastal UK town of the same name is a highlight of the **Edge** social calendar. Ever since its inception in 2006, it has been a congregation point for an industry that, for all its ability to punch above its weight on the international scene, has often struggled to define a sense of self. That's not to say it's a parochial event – speakers come from all over the world, and attendees likewise. But it helps remind local developers that, while they may be making games for overseas financiers, gatekeepers and customers, they are still a community.

That's made clear by the keynote speakers. Jason and Chris Kingsley, founders of Rebellion, know a thing or two about how to build a UK videogame business – and indeed, much more than that, since it now owns sci-fi publishing label 2000AD and recently opened a \$100m film studio in Oxfordshire. They'll reflect on their 26 years in the business during their talk, Rebellion – The Path To Independence.

Elsewhere, Hello Games boss Sean Murray will tell the remarkable story of *No Man's Sky*. Released to a storm of controversy in 2016, it is a game transformed, now playable with friends and in VR, surging in popularity with every update. It's been a rocky road, to put it mildly, but the lessons Murray has learned along the way form a tale well worth hearing. He'll be telling the story with the help of **Edge** editor Nathan Brown, but don't let that put you off.

Remaining keynotes will be announced in the run-up to the show, but

away from the headline acts there's still plenty to chew on. No event that focuses on a creative medium that moves at such a frightening pace as games can afford to stand still, and the addition of a dedicated Discoverability track is welcome given how indies, in particular, are in a constant battle for the media's and players' attention. Among the speakers is Hannah Flynn, of recent Studio Profile subjects Failbetter Games – the talk, titled Everything We Did To Chart On Steam, should make for enlightening listening. Elsewhere, there's a talk titled The Secrets Of Influencer Marketing, in case you're wondering what to do with that tonne of rotten tomatoes you've been storing.

Another addition is a Roundtables track, a series of panel discussions around hot-button, but sensitive issues which, commendably, is open to everyone regardless of whether they've ponied up for a conference pass. Topics include LGBTQ+ issues, mental health, developer unionisation and juggling indie development and pregnancy at the same time.

All reflect an industry whose pace of change is no longer driven solely by advancements in technology – though there's still plenty of that elsewhere. The Evolve track, which focuses its gaze on the bleeding edge, features talks on topics including machine learning, location-based VR and the use of virtual reality in training the emergency services. Across the other conference tracks, attendees will hear from staff at some of the biggest and most successful game companies on the planet (and BioWare). Ubisoft, Rovio, Microsoft, EA and Riot

INDIE VISIBLE
Returning for the ninth year is the Develop Indie Showcase, which invites submissions from lesser-known developers up and down the country. The titles selected for the ten-game shortlist will be given their own stand in the Expo hall; two winners are chosen on the final day of the show, one by an industry panel, the others by conference attendees. Winners will be in esteemed company: among the games previously crowned are *Sunless Sea*, *Hue*, *Lumino City* and *That Dragon, Cancer*.

Games are just a few of the big guns represented on the schedule.

Yet old Develop hands will tell you that the real action takes place outside the main conference. The bar at the Hilton Metropole is abuzz with meetings from morning to night; Meet@Develop lets attendees schedule meetings in advance of the show, with dedicated rooms available to save you trying to get your game signed while standing in a bar, fending off an ad-man who's been on the gin since breakfast. For those who like that sort of thing, though, there's a dedicated networking bar, sponsored by Unreal Engine, in the heart of the Expo hall, which will be free to all-comers and packed with game companies showing their wares. There's also the usual raft of evening, erm, 'activities' which, in true British style, mostly involve a drink or six; in previous years organisers have wheeled in trolleys piled up with bacon rolls for grateful, jaded attendees the morning after the infamous Gl.biz party.

The headline evening activity, however, is the newly rebadged Develop Star Awards show. Streamlined compared to previous years – if 15 categories sounds like too much then believe us, you've seen nothing; there were 24 the year before last – there's a greater emphasis on rewarding game design, with new categories such as the Diversity Star ensuring the ceremony reflects the modern game industry. A panel of industry observers, **Edge** included, whittles down the shortlist; a body of UK game devs picks the winners. The aforementioned Sean Murray, of Hello Games, will be receiving a special award, we're told. Apparently we won't be required on stage to help him accept it and bask in the glory. Maybe next year. ■

Edge is a media partner
of Develop: Brighton.
An early-bird promotion
ends on June 5; for
tickets or more info, see
developconference.com



DEMON DAYS

Exit 73 Studios' spirited debut is a playable cartoon that puts a vibrant twist on vampire slaying

If you thought being a teenager was bad, spare a thought for Becky Brewster: she's also got vampires to worry about. #BLUD is a wickedly stylish 2D brawler influenced by Buffy The Vampire Slayer and Cartoon Network shows. "We studied the art styles of The Powerpuff Girls and Dexter's Laboratory to try and nail that Saturday morning cartoon feel," designer **Chris Burns** tells us. #BLUD's demons are as likely to be cutesy as

gratesque. "Every villain will have vampiric elements, but that's not to say every monster will look like a classic vampire," Burns says.

This is animation company Exit 73 Studios' first full game. "It's a conglomerate of all of our favourite horror movies of the '80s and '90s. We aren't going to try and reinvent vampire lore, but we are going to put our fun animated twist on it." No release date just yet: keep sharpening those stakes. ■



Soundbytes

Game commentary in snack-sized mouthfuls



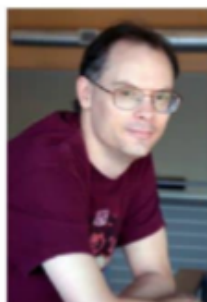
"It has been a fucking nightmare. The fact that we're still so afraid of a topic like weed instead of the **murder simulators** you can market any time, anywhere, it's shocking."

Devolver's **Mike Wilson** reflects on the absurdity of the struggle to promote tycoon sim *Weedcraft Inc*



"Emerging competitors like **Google** have a cloud infrastructure, a community with YouTube, but they don't have the content."

Absolutely, Xbox CMO **Mike Nichols**. Without a *State Of Decay 2*, Google Stadia is surely stuffed



"If Steam committed to a **permanent 88 per cent revenue share** for all developers and publishers without strings attached, Epic would retreat from exclusives."

Tim Sweeney points out that it's a nice storefront Valve has, and it'd be a shame if something happened to it

"Sorry for losing my temper. Someone threw a **fucking raw crab at me**. Barely missed my head. What the fuck man?"

Juan "Hungrybox" DeBiedma reveals the darker, spikier and definitely stinkier side of competitive *Super Smash Bros*



ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game *Akka Arrh*
Manufacturer Atari

Scandal is rare in the arcade scene these days, but a fuss broke out recently after one of the most legendary rarities in coin-op history found its way onto ROM sites. *Akka Arrh* was in development at Atari in the early 1980s – to the extent that production of cabinets had begun. It was the work of Dave Ralston and Mike Hally, Atari employees with credits on the likes of *720°*, *Paperboy* and *APB – All Points Bulletin*. A sort of 360° spin on *Missile Command*, it was deemed too complex for the mass market, and so was killed off.

As far as arcade historians are aware, only three *Akka Arrh* cabinets exist today, and are in the hands of collectors, playable only at the occasional community event – until a recent MAMEWorld forum thread warned readers to "sit down on the toilet before reading this or else you will shit your pants." *Akka Arrh*'s ROM had been dumped, and one of the last great rarities finally became playable in MAME.

Allegedly, the ROM was stolen. So the story goes, an engineer dumped the *Akka Arrh* ROM file while maintaining a collector's cabinets. The source, according to an Ars Technica report, is reliable: another collector who has owned *Akka Arrh* as well as other prized rarities, such as the unreleased *Marble Madness* sequel, *Marble Man*. Sceptics have pointed out it would be difficult for a contractor to hook up a ROM burner and a PC without being noticed.

The case has sparked debate about whether games like *Akka Arrh* should be available for preservation's sake, and whether a MAME release harms the value of a (still very rare) cabinet, or enhances it, since more people will be aware of its existence. We're on the fence, but one thing's for sure: we'd love to play *Marble Man*.

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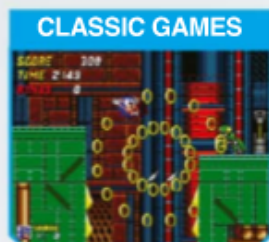


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My Favourite Game

Sam Sykes

The fantasy author on Hidetaka Miyazaki's influential character designs and writing around random encounters

Sam Sykes is a novelist with two high fantasy trilogies under his belt. When he's not writing slasher-fiction on Twitter with fellow writer Chuck Wendig, he's deconstructing genre tropes within his prose. Here, he discusses humanity in *Dark Souls*, *A Link To The Past*'s narrative and writing around random encounters.

What's your earliest memory of games?

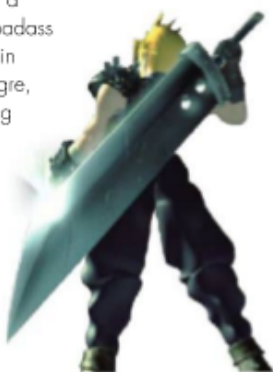
The Legend of Zelda: A Link To The Past was the first game where I was just completely glued to the screen. My mom rented it from Blockbuster. Until then, I thought games were like, 'move from left to right, and whatever gets in your way, attack it'. I don't want to say before I played *Link To The Past* I wanted to be a banker, and then I played *Zelda* – but after it, I started writing stories and they had similarities: a telepathic princess, a stormy night, sneaking into a dungeon.

You've spoken in the past about how Hidetaka Miyazaki pushes for emotion in his Soulsborne character designs. How does that inspire you?

In Western games, the emphasis of a monster is to make you feel like a badass for taking it down. One early boss in *Dragon Age* is this huge snarling ogre, and the first thing you see is it eating someone and throwing their body against the ground. Compare that to Gwyn, the final boss of *Dark Souls*. Sure, he's carrying a huge flaming sword, but when you look at him, he's not hulking or menacing. His eyes are sunken, his beard is scraggly – he looks weak! You see that

FIGHTING FANTASY

Following his well-received fantasy trilogies *Aeons' Gate* and *Bring Down Heaven*, Sykes has embarked upon another series of novels titled *The Grave Of Empires*, with the first book, *Seven Blades In Black*, recently released in the UK. Starring Sal the Cacophony (the name of the vagrant protagonist and her weapon of choice), Sykes describes it as a trope-defying "love letter to *Final Fantasy*" with the book being framed around "a war between a decadent magical empire and an upstart force of machinists." He's currently hard at work writing the sequel to *Seven Blades In Black*, and relaxes – sort of – by balancing multiple RPG saves and writing Twitter threads that are being adapted into meta-slasher movies. As you do.



he has given his life to protecting this flame and after you defeat him, there is an absence where he once stood. Western RPGs diminish the humanity – put in pupilless eyes and badass spikes so it doesn't look like a human, it looks like an obstacle – but in Japanese games, they give them big eyes and haunted expressions.

When you're describing characters, do you ever take cues from that approach?

Oh, yeah. Take the concept of a random encounter. You go into a dungeon and you fight an ogre, and its sole point is to give you experience so you can level up and move to the next boss. You can't do that in a book. The combat has to be memorable. In my book *The City Stained Red*, the main antagonists are this violent cult who appear insane. Yet, the deeper in the story you go, you realise most of them are under crushing poverty, and they've been cast out and tossed around by society. So when our heroes kill them, they're basically killing someone that was so desperate that they turned to drastic means to survive. That has an emotional weight.

The lead of your latest book, *Seven Blades In Black*, is a dynamic female renegade. Did you take inspiration from any videogame characters?

Tifa Lockhart from *Final Fantasy VII*. I loved that she was so in tune with her emotions. She got into the action, but

made no apologies for being passionate or caring about people. The urge for a lot of authors is to write characters who are like, 'feelings are for suckers', and that's so boring because you turn the character into another obstacle.

Do you still have time to play RPGs?

I'm going through *Persona 5*, and it kind of solidifies everything I've been talking about because that game is nothing but emotion. All of the monsters and everything there is only in service to the characters finding their emotions.

Have you ever thought about writing for games?

I have, and I'm definitely open to it. Ever since childhood the ultimate dream has been to make my own. But you know, with everything I hear about the game industry, it becomes more and more

daunting. And I don't know if I'd want to make a triple-A game. I find that indie games have actual style, whereas with triple-A games, it feels like a race to see who can make the most hi-def pores.

So what's your favourite game?

Alltime, I'll have to go with *Final Fantasy VII*. I'd played RPGs before that, I'm a huge fan of the *Breath Of Fire* series, but those games had characters, and some of them were just like... there. *Final Fantasy VII* was the first game I played where everybody had a reason for doing what they were doing. Except for Vincent. I don't know what his deal was. ■

Intriguingly, Sykes recently asked on Twitter whether 'Seven Blades In Black' could be translated into kanji. How far does the JRPG influence extend?



TV SERIES

Dead Pixels

bit.ly/deadpixtv

The highlight of this six-episode comedy looking at the real and virtual lives of a group of MMO-addicted pals comes two episodes in, when one of the party harangues what she deems to be a fake gamer girl at a bus stop. Taking issue with her anime hairdo and *Metroid* T-shirt, she shouts the legend: 'Have you ever shit in a bucket?' If that suggests a show that positions true 'gamers' as basement-dwelling shut-ins, well, you're not that far off, honestly. Social engagements and the working day are, if not avoided, then at least resented. But creator Jon Brown, a former *Peep Show* writer, knows his onions – he's a past guest of *My Favourite Game* – and while the show spends most of its time in the gutter, it's got heart too, understanding the bond that forms between people with a shared obsession.



VIDEO

World 1-1, Ten Different Ways

bit.ly/mario10ways

1-1 is the work of Big Breakfast Collective, and placed third at Nordic Game Jam 2019. This video does a lovely job of summarising what is essentially a creative extended joke about Mario jumping on a goomba heads: 1-1 views *Super Mario Bros* through the lens of ten different game genres. In an FPS, Mario flings fireballs at enemies; a text adventure goes into unsettling detail about a fatal stomping; an FMV scene starring the devs presents you with a moral choice. There's even a nod to recent puzzler *Baba Is You*, and the *Loom* tribute is hilarious stuff.

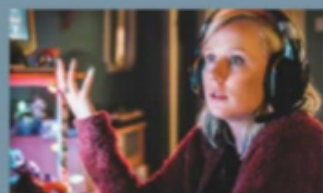
WEB GAME

UWOG

bit.ly/uwoggame

Another game from Stephen's *Sausage Roll* creator Stephen Lavelle, meaning another brilliant feat of puzzle architecture to admire long before we've figured out how to play it properly. We instruct four different factions on how to behave when presented with a series of randomly generated crime-or-virtue scenarios, all while mentally juggling knock-on effects: people will automatically repeat behaviours they've been told to perform in the past, and punish others for neglecting a virtue they ascribe to. It touches unfavourably upon issues of race and sexuality; then again, the religious overtones suggest that's the point. This sharply showcases the pitfalls of imposing arbitrary binary doctrine on a nuanced pool of variables. No sausages though, so how good can it really be?

UWOG	
Thou shalt	Thou shalt not
Search (right)	
1. Thou shalt not search (right)	1. Thou shalt not search (right)
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10. Thou shalt not search (right)	10. Thou shalt not search (right)



THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

CONTROLLER

Nacon Revolution Unlimited Pro

bit.ly/revunlimited

It's always struck us as strange that Sony never put its own spin on the Xbox One Elite controller – and it's even stranger to see this eventual response to Microsoft's luxe offering made under licence by a third party. Nacon's Revolution Unlimited lacks some of the Elite's features: there's no swappable D-pad, and there are fixed buttons rather than removable paddles under the grips. But it's got a few ideas of its own. Onboard headset controls are a welcome inclusion, and a box of weights, which slot into compartments on the controller's underside, are a nice touch. At £120, it's quite an investment this late in PS4's life; that said, if PS5 doesn't support the controller, at least your PC will.



continue quit

Monster cat

Sanrio and *Puzzle & Dragons* – the most ambitious crossover ever

Effing and Jeffing

Overwatch gets a player-facing game scripting system. You balance it, then

Flow like water

Air-swims, skips, cheese strats – *Sekiro* speedruns are getting ridiculous

War of the words

Microsoft's 'trash talk' guide is nicely done

Teething issues

The live-action *Sonic* is being redesigned. Can you edit Coolio out too?

Labo Link

Zelda VR mode isn't what we'd dreamt of, but at least the framerate's terrible

Code violation

A Dark Room is pulled from Switch eShop over hidden code editor

One million tweets

The real Claptrap lives on Randy Pitchford's Twitter



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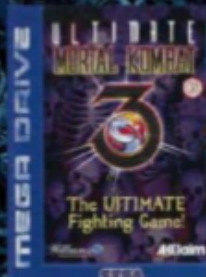
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DISPATCHES

JULY



Issue 332

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a year's subscription to PlayStation Plus, courtesy of Sony Interactive Entertainment



PlayStation Plus

Prime suspect

Having watched the character models in the trailers for the live-action Sonic The Hedgehog and Detective Pikachu, my interest is piqued by both for entirely different reasons. While Detective Pikachu looks decent, thanks to the humility and talent of Ryan Reynolds, Sonic looks like a trainwreck ready to unfold. Possibly the main problem is the excessive anthropomorphising of Sonic compared to the Pokémon, whereas the latter look cartoonish, detailed and faithfully recreated. The Pokémon seem somewhat less disturbing and off-putting when compared to the hyperrealistic Sonic, with the somewhat normally proportioned legs and trainers, and the unnatural lack of gloves.

Looking past that, if you can, the plot as a whole looks awful and highly derivative (somebody's seen X-Men in regards to that time-pause). Jim Carrey's character seems mostly unfamiliar apart from a brief cameo at the end where he actually looks something close to Eggman. I honestly don't know who they're targeting – any adults who wilfully want to see this, I don't know what to say to you, and I can't see kids really wanting to see this character in cinemas either.

However, if somebody at **Edge** is willing to forfeit their time and sanity to review these movies for the magazine... well then, let's just say I would (somewhat remorsefully) be intrigued to hear about both.

Owen Hiscock

As we go to press, it appears they're going back to the drawing board on Sonic. Phew.

New tricks

As of writing, the Wired interview with Mark Cerny is still doing the rounds, and with Microsoft expected to launch the next iteration of the Xbox at E3, it seems we have finally made it to the next generation.

Of course improvements such as an SSD drive, no loading times and the near-mythical promise of 8K are seriously head-turning, and seem to suggest a full generational leap, but what I'm most excited about is also likely to be the place of least iteration – the controller.

We are now looking at two decades since the dual-stick controller became de rigueur, and, Nintendo aside, the standard seems to be the one place where it is essentially a *bête noire* to digress from this norm. Granted, most triple-A games nowadays fall into the first- or thirdperson action-adventure genre and therefore this standard seems best suited to cater to these types of titles, but

I cannot accept that this is a plateau for player control. Last gen Sony trialled its in-controller mic and touchpad, neither of which seem to have really taken off, and Microsoft doubled down on the 'if it ain't broke' mentality and tried to perfect what it already had. Even with the Switch, Nintendo seems likely to ditch advances such as HD rumble with the next iterations.

But this can't be it, right? The controller that I played *Ape Escape* with in the early 2000s will be the one that I clutch in the grave, having played *GTAXIV*? Where else can the humble controller go, and is it folly to assume that this is it?

Martin Hollis

A suspiciously well-timed missive given what's on the cover, Martin. Have you been going through our recycling again?

The missing

As usual, after work I make my way to the room containing my PS4 to relax, unwind and uncouple myself from the corporate world I spend too much of my day within. This isn't a particularly novel journey by modern standards but mine is often filled



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with guilt because while I'm staring at my monitor, my roommate is downstairs. As a result I often keep my play sessions to a minimum so I can join them later on.

Usually, by the time I move into the living room later in the evening they are also relaxing by playing mobile games, bingeing crime dramas or doing a jigsaw puzzle. The social time I've lost with them by playing videogames in the other room inevitability makes me feel more guilty.

However, something struck me while reading Steven Poole's *Trigger Happy in E330*. I now realise my guilt was largely for nothing, as playing mobile games, bingeing crime dramas or doing a jigsaw puzzle are helping my roommate unwind in the same way videogames are helping me. They are all simply puzzles of varying degrees of interactivity and challenge.

The benefits from puzzle-solving in my current play sessions of *Sekiro* will provide a similar relief to my flat mate trying to guess whodunnit in *CSI* or finishing a level of *Candy Crush*. I realise now that both our methods of puzzle-solving are equally important after a long day's work and I shouldn't feel guilty about not socialising straight away. Instead we're both doing ourselves a favour by unwinding in our own unique ways.

Zak Evans

Well, we all have to do what we must to get through the day. We're not sure we'd call playing *Sekiro* 'unwinding', mind you.

Broadchurch

I've just come back from a wedding between two close friends (I cried) and it got me thinking about the first big commitment I can remember making: Nintendo 64 or Sony PlayStation? Nintendo won out in the end thanks to the likes of *Mario Kart 64*, *Mario 64* et al (again, I cried) though it also meant that I missed out on a lot of Sony exclusives (I've still not played *Final Fantasy VII* despite an adoration of the genre).

Fast-forward 20-odd years and I can now play *Final Fantasy VII* on my Switch, PS4, PC or Xbox One (if I had one), but I might not ever do so. Much like every relationship there comes a point where familiarity, or over-familiarity, creates a barrier to loving, meaningful interaction. For some it means overcoming that barrier and potentially getting married, for others it means staring at a colossal library of Steam games before deciding to switch the PC off and watch trash on Netflix in deathly silence just to get a taste of something different. Sorry, *Final Fantasy VII*, I don't think you'll ever pull me away from endlessly watching twee crime dramas.

Which brings me onto choice, or more specifically, Stadia, which from what I understand is partly billing itself as a choice of how to experience games, though the unintentional choice appears to be whether I want to play games uninterrupted from a disc or play games with shoddy streaming quality on an average internet connection in suburban Wales. Unoriginal sarcasm aside, I'm willing to bet that Google's attempt to marry up gaming audiences and platforms into a new community streaming service will ultimately end in an inamicable divorce, as people realise that a committed relationship to a personal game library has far more appeal than a library that everyone has as a little bit on the side.

But then what do I know? I once bought *Chameleon Twist* before realising my mistake and selling it weeks later.

Alexander Davies

So what you're saying is that if Google's new internal development wing makes a *Midsomer Murders* game, you'll be all over it? Us too. For the second month in a row, irony decides the recipient of a year's PS Plus. All yours.

Line of duty

Thank you for the lovely article on *EverQuest* (E331). Who would have thought it was actually still being played, let alone recently increasing in popularity? Apparently this has to do with the designers preserving the original version's

esoteric nature: make the game about exploration, preferably with help (or misinformation) from others. It's heartwarming to read that the designers actually talk with and learn from fans setting up their own servers. This is why I don't play *World Of Warcraft* any more, but have been contemplating returning to their upcoming *Classic* (ie 'vanilla') release.

However, reading about the compromises Blizzard is making with its re-release, I am having my doubts. The thing is, the charm of old-school MMOs is their lack of accessibility. I want to find myself spending time to find people to raid with. I want unclear directions so I might stumble onto something I wasn't expecting. I want some quests to be too hard, too long, too weird, because that's what makes them memorable. Above all, I want to need other people's help. There's nothing more uniting than the feeling of us against the world.

I must admit, this genre requires a critical mass of players, and thus, if *WOW Classic* turns out to be too repulsive, they won't stay around. In retrospect, its 2005 release seems like the perfect storm of 'something so new, everybody has to try it' and 'something so new, it's still rough around the edges', and I doubt we'll ever experience something like it again.

EverQuest sounds more like the kind of game I could end up playing for the next three years on a daily basis (*Clash Royale* is finally starting to feel a bit stale, and *Fantasy Strike* still has to be officially released). Dare I make the plunge? I find myself afraid I'll be the only one who doesn't know the game like the back of their hand. Please write about the next MMO which has a clean slate, so I can be part of the next massively multiplayer adventure.

Robert August de Meijer

Indeed, part of the charm of many games of this ilk is that you fall in love with them despite their flaws. Removing them from a later version may make for a technically better game, but something gets lost along the way. Perhaps that's why all these GaaS releases are such a mess at launch; we await *Anthem's* transformation into greatness with interest. ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

So, is videogame hardware dead, or at least dying? As Sony releases the first details about next year's PS5, that seems to be the bet that Google is making with its Stadia game-streaming service. In this bright future, gone will be the days of large upfront investments in black boxes that become progressively more technologically obsolete over their lifespans. Instead, cutting-edge games will be more accessible to everyone, everywhere. No one will care about the particular box doing the calculations in some server farm. The videogame industry will be finally free to be all about the games. The attraction is obvious, though you won't catch me flogging my Neo Geo Pocket Color or Game Boy Advance SP on eBay, because these pieces of exquisite consumer hardware design are physical memory palaces that are crammed with the hours of pleasure I got from using them. But more generally the idea that, in the digital age, we won't mind if everything becomes immaterial is plainly false, as evidenced by the resurgence in music released on vinyl and, more recently, even cassette tape. And people who play games on their phones still care about the phone's hardware. So in this respect, the fact that the Stadia controller looks so utterly and safely generic — like a DualShock crossed with an Xbox controller and then rigorously super-blandified by a crack committee — seems like the wrong way to go. I would be more interested in Stadia if the controller were innovative, like the N64's, or just insanely weird, like *Steel Battalion*'s.

As a grizzled veteran of virtual failure and death, though, what did pique my interest was the Stadia feature called State Share, by which players can follow a link to an exact moment in any game. The analogous thing has always been possible in other forms of media — you can simply quote a passage of text from page 296 of a book without requiring someone to read the first 295 pages; you can show them a clip



What State Share also promises is an entirely new way for videogame players to interact in a ludic way

from late on in a movie without forcing them to sit through two hours, and so forth. But (short of extremely fine-grained cheat codes), this has never been possible in videogames. All that is available is video of someone else playing through that particular part of the game, which is of course very different from experiencing it yourself. And the fact that this has hitherto been impossible is a shame for the discursive development of videogame culture in general, particularly for those of us who would like to appreciate and discuss certain

game moments that we are certain we will never be able to experience for ourselves.

I'm completely sure I would hugely enjoy just wandering around the blasted natural beauty of the later levels in *Sekiro: Shadows Die Twice*, for example, but there's no way in hell (almost quite literally) that I'm ever going to get there myself, having regretfully come to the settled opinion that, for me, From's remarkable-looking games are just Too Hard, and to work on my guitar shredding is both easier and more rewarding (for me, if not for my band's audiences). But if someone were to State Share some amazing moment from late in *Sekiro* so that I could feel it rather than simply watching someone else ace it with a flurry of confusing twitches on YouTube, that would be very interesting.

The obvious problem with this concept, of course, is that what is exciting about a moment late on in a game is usually bound up intimately with what you have learned to do in it, through painstaking hours of skill acquisition, practice with your gadgets and weapons and working your way up through the enemy ranks. Drop me in the latter stages of *Sekiro* and, if I'm actually required to fight, all you'll be sharing with me is a depressing series of baffled instadeaths; which, frankly, I can already get at home.

But what State Share also promises is an entirely new way for videogame players not only to show each other things, but to interact in a ludic way — so, at least, hinted Dylan Cuthbert of *PixelJunk* studio Q-Games, who said that his team is working on something built around this as a gameplay feature. If this presages a future where it is more often possible just to jump in to beautiful parts of a game without having to grind for dozens of hours to earn the right to consume the good parts of the digital product one has paid for, then I'm all in — but still, hands off my old hardware.

Steven Poole's *Trigger Happy 2.0* is now available from Amazon. Visit him online at www.stevenpoole.net

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NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

Crunch is a topic I've consciously avoided writing about ever since I penned the first Big Picture Mode some 380 years ago. If I'm perfectly honest, I'm a little conflicted about it. Don't get me wrong – I am not about to try and defend multimillionaires working their rank and file to the bone. But as regular readers of this page will know, I like nuance, and lament its absence from modern-day videogame #discourse. This column, after all, was at first envisioned as using print's distance from the 24-hour news cycle to take a more even-handed, zoomed-out look at the issues of the day. Admittedly it has since become a monthly cry for help from an increasingly added new parent, but that's not to say we can't yank it back on track every so often.

Whenever I read a report about working conditions at some triple-A studio or other, I have the same human response as (hopefully) you do: how infuriating, and how miserable, that people in the business of creating fun should be working under such conditions. But there are *degrees* of this stuff. Some are worse than others. Yet we tar them all with the same brush, repeat the same calls for bosses to be fired, for developers to unionise, for would-be consumers to vote with their wallets.

I see why, but I'm not sure that gets us anywhere. After Kotaku published its story about Rockstar's working conditions shortly before the release of *Red Dead Redemption 2* last year, the **Edge** inbox received several emails insisting we factor the report into our review score. I replied to one of the more even-handed ones, pointing out that if we did that, we could never review another videogame without first having sight of each developer's timesheets. In any case, the report itself didn't exactly paint a black-and-white picture of the development conditions at Rockstar, by its author's own admission.

Yet there was a clear running theme to the Rockstar report: there was still a culture, even if an unspoken one, of overwork. I know, from



We tar them all with the same brush, repeat the same calls for bosses to be fired, for developers to unionise

the devs I speak to, that this is, if not an industry-wide thing, at least still a prevalent one. Perhaps it comes from those tales of Japanese legends sleeping under their desks to get some stone-cold classic over the line. Maybe it's just another example of late-stage capitalism screwing over the many to line the pockets of the few. Most likely the truth lies somewhere in between, in stories no one is either willing, or able, to tell.

The recent fuss around *Fortnite* puts this into its starkest context yet. It seems to me that a degree of crunch is inevitable if you wake up one morning to find that your game

has exploded in popularity. If you want to stay on top with a game like this, you need to ensure you update constantly, keeping the game in the headlines, on Twitch and YouTube, and therefore uppermost in players' minds. You also need to hire; Epic has done that at pace (Polygon's report pointed out that, at the time of publication, there were more than 200 vacancies on Epic's recruitment page). But that doesn't solve the problem either, because the overworked staff now have to worry about training up the new arrivals as well as their own swollen to-do lists. The only remaining options are compensation – *Fortnite* developers are apparently getting three or four times their annual salaries in bonuses – or to slow down the pace of updates. But doing that runs the risk of the game falling in popularity, and all those people potentially losing their jobs.

I don't know what the way out of that is. But I do see, in Epic, a company that knows it has a problem and is trying to figure out how to fix it. Lumping it in with a Rockstar, or a Netherrealm (a recent exposé sparked a claim that a developer had literally died at their desk) or the Japanese desk-sleepers of yore not only doesn't seem fair – I don't think it helps, either. It sends a message that trying to alleviate crunch by spending money doesn't work, and won't win you any friends. So you might as well just use that \$100 bill to light another cigar. The hell with the workers.

Please don't read this as a lack of empathy on my part. Believe me, I know plenty about overwork; you don't make a videogame magazine every four weeks in the year 2019 without making sacrifices. I realise that there is little appetite for nuance in an era where outrage is the default position. But just as this industry can do better in its treatment of its staff, so can we all in the way we analyse it. Anyway, sorry for the tangent. I'll get back to the important stuff – moaning about my kids – next month.

Nathan Brown is Edge's editor, and is fully aware of the irony in him writing this bit at 10.32pm on a Tuesday



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ALEX HUTCHINSON

Hold To Reset

Building a new game, a new studio and a new life from the ground up

Sometimes it seems like game development is its own worst enemy. We develop core tech, while building content in parallel, while writing the script, while growing the team, while bizarrely doing press (usually before the game is finished). The industry's roots in technology probably contribute to the fear of something being old or surpassed, which leads to this ridiculous situation even though it makes a hard job even worse. So it is that we are preparing our E3 demo, while iterating on our alpha build, while showing early code to the press, and to compound the challenge, while Sony and Microsoft decide to announce new hardware.

And just like the release of Xbox One X and Playstation Pro, these releases are coming at a much faster rate than earlier generations. Both Microsoft and Sony seem to be pursuing strategies akin to the way in which cellphone manufacturers work, with incremental upgrades released every few years and a big push for compatibility across multiple consoles. This feels like a weird decision, even ignoring that traditionally hardware has been sold at a loss and then subsidised by software. Historically, one of the primary benefits of consoles was that you bought them, plugged them in, inserted (or downloaded) your game and started to play. No setting up of drivers, no compatibility issues, no messing around, and never that creeping sense of the PC player that everyone else is playing a better-looking, smoother-running version of the game than you are.

But assuming this isn't a disastrous decision that will make it impossible for casual players to know which console they should buy, and which console supports which software – and that it won't mean that each new game will come with a spreadsheet to show you which Xbox or PlayStation the game you may want to buy will actually work on – then what does it mean for a studio like Typhoon? In short, it means more work.

Working on shifting sands is never fun. Making a game for nonexistent hardware is



Working on shifting sands is never fun. Making a videogame for nonexistent hardware is even worse

even worse. But as these new consoles (and I've yet to see firm details) seem iterative, and we're late in our dev cycle, it's a different issue. Because of our smaller team size, we can't build the kind of assets that these machines can apparently push. And since we want to reach the biggest audience possible across multiple consoles, the best solution is to aim for the middle and make one game that works on everything, regardless of power. In fact, the quality and quantity of assets you would need to create to push these machines are beyond the budgets of almost everyone except the multinationals. So you can expect

a Sony, Ubisoft or Rockstar game to make your purchase worthwhile, but not much else.

On the other hand, new hardware hopefully means new players, and if the guts of the machine are sensible, then it should be relatively simple to support and we can maybe sell a few more copies. *Savage Planet* looks pretty great on a 4K screen, so I guess there's that. But with the alternative future of gaming being pushed by Microsoft and Google being all about subscriptions and streaming services, why increase the rate of hardware production? If they truly believe that the next 'real' generation will no longer be a physical box, then surely longer cycles makes sense as opposed to shorter ones? Or perhaps this is a retail Trojan horse that aims to push their hardware pipeline toward updates so that they can upgrade gaming boxes into the streaming hubs of the future?

We will know soon enough, and we will no doubt be dazzled by sheets of numbers. My hope is that they articulate their strategy for consoles, so devs can understand what the landscape is likely to look like for the next five or ten years and plan accordingly.

Because even as a consumer, I'm certain what I'm going to do. I love new hardware. I love the smell of fresh engineering as you take it out of the box, I love a new controller, and I love the first day of bringing it home with a stack of new games to test, even if your parents accidentally bought the 'education series' math version of *Donkey Kong Jr* for your brand new NES. But for me, part of that joy was that it was usually a significant leap, and I hadn't felt the need to shell out a bunch of cash for several years. Better still, it didn't complexify my current gaming setup; it ushered in a new generation of gaming experiences. But looking at it right now, the minor iterations Sony and Microsoft are hinting at don't seem to fulfil any of those criteria, so for the first time in 20 years, maybe I'll skip the next 'generation'.

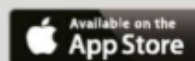
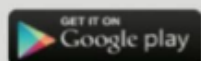
Alex Hutchinson is co-founder of Montreal-based Typhoon Studios. He can be found on Twitter at @BangBangClick

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THE GAMES IN OUR SIGHTS THIS MONTH

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Explore the iPad
edition of Edge for
extra Hype content

Stop hitting yourself

Despite decades of technological progress, violence remains the default language of videogames. For all that the designers' vocabulary has expanded, and continues to do so, most of its verbs are still describing various ways of hurting things. As such, this month's Hype crop is a rare one indeed; for a change of pace, and to perhaps cleanse the palate before another presumably blood-soaked E3, we have largely put the guns away.

We can't help what we've become, however – clearly all that fighting does something to you. That, at least, is our excuse for why we ask Frontier Developments, maker of the intriguing *Planet Zoo* (p38), what would happen if we were to put carnivores and their prey in the same enclosure. That, judging by the devs' reaction, is emphatically not part of the plan. These are believable creatures, with their own AI routines and some of the most lifelike animations we've seen. We might as well have asked them which of their pets would win in a fight to the death.

We don't really expect to see the brutality of the food chain in a game set in a zoo, admittedly. Yet in *El Hijo* (p50) we find something truly subversive, at least in the context of a videogame. Honig's eye-catching adventure is set in the Old West, but there's nary a gun in sight; it's a stealth game with no snapped necks or close-up knife kills, just a kid trying to evade the local guards. Fail, and there are no grisly death scenes: you're simply popped back at the nearest checkpoint.

It's certainly not a typical month when one of the more violent titles we feature is a driving game. Yet the makers of *Pacer* (p46) have an excuse. This is a most earnest tribute to the futuristic racers of yore, and you can't make a game that feels like *WipEout* without mounting guns on a few anti-grav bonnets. *Pacer* may not feel much like progress, but that is precisely the point – and rather than the odd one out, it's merely proof of the progress games are making, for all that they remain in hock to the past.

MOST WANTED

Blood & Truth PSVR


We fell immediately for SIE London's cockney caper, which leads a springtime rush of PSVR releases. Connectivity problems have marred our previous sessions; we look forward to seeing how it holds up away from the convention circuit's choked Bluetooth networks.

Resident Evil 4 Switch

Yes, we suppose we're buying it again. If anything can disprove the theory that every game ever made belongs on Switch, this might be it; the Joy-Con analogues aren't the best for precise aiming. But come on, we're getting it anyway. It's *Resident Evil 4*.

Persona 5 Royal PS4

While we're still a bit grumpy about the promo campaign that suggested *P5* was headed Switchwards, this will do nicely – an expanded version that adds a new team member, interactions between characters, and the previously absent third semester at the gang's school.



Paper Beast explores the link between the technological and the natural. "We write on paper, which comes from trees – but it's for data, at the same time," Chahi explains. "So there's a strong link there"



H | Y
P | E

PAPER BEAST

Another World's creator returns to
unfold a shifting universe

Developer/publisher	Pixel Reef
Format	PS4, PSVR
Origin	France
Release	2019



PAPER BEAST



Sight and sound

Paper Beast has a three-person team working full-time on its spatial audio. "Audio is very important for any VR game," Chahi says. "Especially for *Paper Beast*, because the universe is not realistic. To make it believable, we need to have sounds that are believable, but they have to sync correctly with activity because this world is odd, on the edge of the artificial and the natural." Noises are made with materials such as paper itself. The firstperson view ensures that much of Chahi's direction relies on sound. "It's difficult: If something is happening behind the player and you really want them to see this without saying, 'Hey, stop, look here at this cinematic thing!'", then you have to prepare your scenography, your level design. It's pretty hard."

Eight years on from the release of his previous game, you'd be forgiven for thinking **Éric Chahi**, creator of *Another World* and *Heart Of Darkness*, had given up on videogames. But he assures us that's not the case. "After *From Dust*, I took some rest," he tells us. One year passed, after which he began to play around with physics and 2D procedural locomotion in Unity; another year later, he'd meet programmer François Sahy. Initially, Sahy was simply hoping to pick Chahi's brain on creating realistic fluid simulation; the two ended up collaborating on a "dream project" in 2014, a 3D interactive lava simulator for a volcano museum on the island of Réunion. "I love volcanoes," Chahi laughs. "Maybe you know that."

Indeed, Chahi's fascination with the lava-spewing landmarks has coloured much of his work on games. None more so than *Paper Beast*, however: the forthcoming VR-first title – and indeed, Chahi's new studio – sprang directly from the fertile ground of that dream project. "We started another project, a VR volcano experience only for that museum," he says, describing how their photogrammetry work and lava-flow simulation recreated the experience of being caught among an erupting volcano. It was his first experience developing for virtual reality. "After that, I decided to create another game with a team, and that was the start of Pixel Reef."

Chahi's studio, founded in 2016, is a product of necessity. "I created games alone a long time ago, and there was that freedom of just being really independent," he says. "But today it's difficult to really work alone. I tried at the beginning, but I would have had to reduce the scope of *Paper Beast*." With several challenges to address – robust interactive simulation, developing for a new platform, and even just the various demands of publishing a game nowadays – Chahi needed a team he could rely on.

The result, so far, is captivating. *Paper Beast*'s stylised world – a strange ecosystem that's sprung up in the digital void of Big Data – is eerie, watercolour clouds bleeding into achingly vast stretches of sand. It's arid, but not entirely barren. Origami wildlife wanders the plains: dainty-footed quadrupeds

with their backs folded into impossible arches, collaged arachnids skittering across the dunes. As a kind of unseen god, you interact with these creatures and their environment to learn more about them. Pick up the unfortunate things by a leg or a tail, and you can set them down wherever you wish. You might encourage a larger creature to move an obstacle or dig in a certain spot, or bring together predators and prey to observe their behaviour. Smaller beasts, for instance, will huddle close to large ones for protection against their medium-sized predators.

A sandbox-style portion of the world allows you to shape terrain and create your own ecosystem, but it's the main narrative that is set to intrigue most. You're also a VR interloper in *Paper Beast*'s narrative, you see, trying to pick apart this phenomenon. "An engineer didn't code this ecosystem – it just emerged," Chahi says. "And then you discover

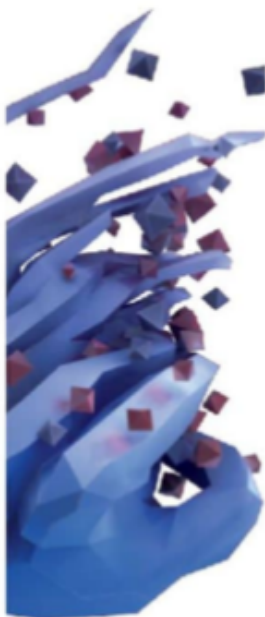
"It's something artificial, but very fragile and vulnerable, like real wildlife is"

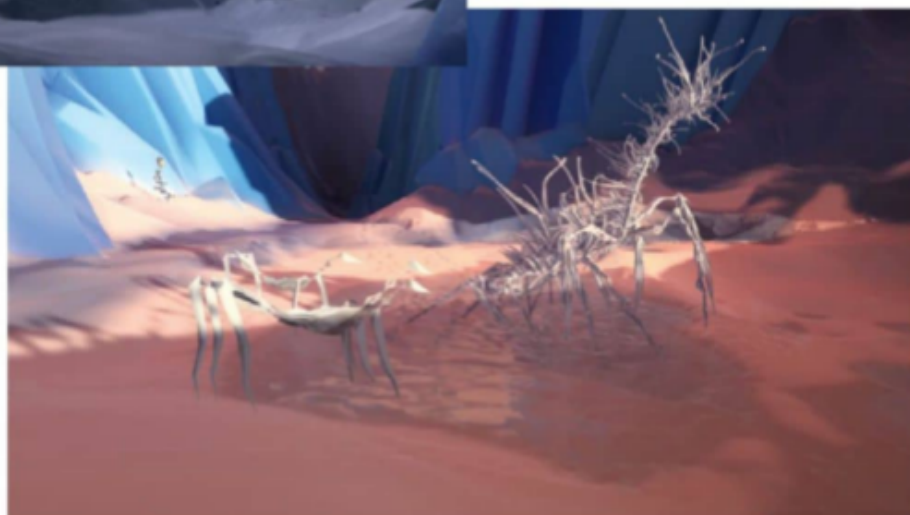
that world, like a virgin land. And the interesting topic is: if wildlife grew inside Big Data, what would be the pressure on it? Big Data itself could be a pressure on that bubble of life. It's something artificial, but very fragile and vulnerable, like real wildlife is."

He cites Playdead's *Inside* as an influence on the progression of the adventure. "There is no clear goal that is given to the player – for *Paper Beast*, it's the same. You arrive in that world in a very curious way. Imagine you're dropped in the Serengeti, and you walk. You don't know where to go. But things happen that lead you forward, and in the end, you have a natural view of everything." Your goal shifts according to your developing understanding of the world. "There are a lot of surprising moments and twists in *Paper Beast*," Chahi smiles. On the face of it, however, this is just what we'd expect from the *Another World* creator: a hauntingly beautiful landscape in constant, dangerous flux, made more spellbinding than ever before with the help of a VR headset. ■



Éric Chahi, creator of *Paper Beast* and Pixel Reef co-founder





TOP Motion in VR has been tricky to program. *Paper Beast* uses both teleporting and continuous motion: Chahi is sensitive to sickness. "I like experiences where you don't have to move a lot in VR," he says, praising *Statik* and *Job Simulator*. ABOVE Creatures only notice your existence when you interact with the world. LEFT It's the first Chahi game in which you can't die: a storm scene convinced him death would take players out of the moment. BOTTOM Winds mean light creatures can fly, and some plants can blow away to germinate elsewhere

H | Y
P | E

PLANET ZOO

Frontier turns its tech to lions and tigers and bears, oh my

Developer/publisher	Frontier Developments
Format	PC
Origin	UK
Release	Autumn

There's a moment in our demo of *Planet Zoo*, the follow-up to Frontier Developments' theme-park sim *Planet Coaster*, that captures perfectly the fantasy the studio is shooting for. The camera floats above the clouds, overseeing all creation, before plummeting with all the sudden gravity of a rollercoaster drop, into an enclosure filled with lions. Each member of this small pride roams around with convincing independence, one clambering down a slope to paddle around their player-constructed pool. The camera pushes in further still, until we can pick out every strand of fur in their manes. What makes it truly remarkable is the scale, and the contrast between the bird's- and worm's-eye views. The demo repeats the trick, zooming out and whizzing across the zoo, past large constructions and a closed-loop railway, to pick out a family of African elephants, where one calf is in the water using its trunk as a snorkel. Then it's onto the zebras, the grizzly bears, the peacocks...

A single zoo can contain hundreds of animals, across dozens of species, and Frontier wants them all to be equally believable and engaging to watch. "We never wanted any animal to feel like a reskin of another one," lead animator **Chris Marsh** tells us. "One thing we found with *Jurassic World Evolution* is that everybody has their favourite dinosaur, their

favourite animal – and if the player feels like their favourite hasn't been given as much love as another species, that would be a shame."

Planet Coaster isn't the only Frontier game that's feeding into the development of its latest project. "There's a lot of DNA in *Planet Zoo* from our history," Marsh says, pointing back to the aforementioned *Jurassic World Evolution*, which applied the studio's management-sim template to a park full of dinosaurs. Beyond that, there's *Zoo Tycoon* and its *Kinectimals* games for Microsoft and, further back still, the PS2 game *Dog's Life*. This helped equip the animation and programming teams, many of whom worked on these earlier projects, with the skills needed to create realistic animals. But scaling that up to an entire ark's worth of species, able to react dynamically to user-generated geometry as players turn molehills into mountains underfoot, or paw or hoof? That would require a fresh approach.

The solution, principal programmer **Ollie Powell** explains, was "finding core sets of animations that could be shared and tweaked in a procedural way." The basic elements of a walk cycle for a lion, for example, can be applied to the rig for a zebra or any other quadruped. "The retargeting system actually takes some inspiration from *Spore*," says Powell. "They figured out this idea of how you generalise motion into this abstract motion ►



Ollie Powell, principal programmer (top), and lead animator Chris Marsh



Zebras might not be able to change their stripes, but that doesn't mean they should all be the same. Frontier is designing various patterns of markings, which can be passed down from parent to child.



PLANET ZOO



essence, ready for any skeleton, and then reapply that to different morphologies."

This might sound like it would result in a zoo filled to bursting with lions, tigers and bears all marching in perfect step, but the key is the tweaking. Powell and Marsh show us how a zebra's walking animation can be carried across to a camel, then slowed down to give it a more deliberate gait. With a couple of tweaks to the posing of the camel's underlying skeleton – the neck raised a little, the head held just a tad higher – the two animals quickly feel distinctive, even walking alongside one another. "Layer on these little shakes, eye twitches and ear flickers," says Powell, "and if they're out of phase with each other, you get all of this variety emerging." Combined with procedural systems such as foot planting, headlook and ragdoll, the game can summon a menagerie of believable creatures relatively quickly, and "free up animators to do the bespoke lovely stuff".

Frontier has commissioned research on each species' needs and behaviour

He shows us a peacock spreading its tailfeathers, each one unsheathing from beneath its neighbour and fanning out beautifully. Then a loop of two lion cubs playfighting and tumbling over one another, as compelling to watch as it is adorable. These are moments handcrafted by the animation team, and are what Marsh refers to as "the little motions that make an animal unique". This combination of procedural and handcrafted animation enables Frontier to create animals that feel believable both with the camera pointed straight into their refractive irises, and with it pointed down from the skies, watching a herd move as one. But, you might notice, this is all concerned with the act of watching rather than interacting, and that's partly because Frontier is currently keeping details about the game's management and construction aspects fairly close to its collective chest.

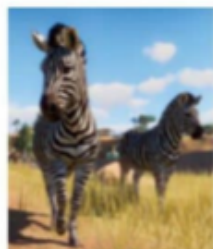
The suggestion seems to be that *Planet Zoo* will stick fairly close to its theme-park predecessor, albeit with an extra layer of management in keeping animals happy and

healthy. They'll need to have their habitat and nutrition needs met, and be paired up carefully to avoid inbreeding. This side of the game is founded in reality: Frontier has commissioned research on each species' needs and behaviour, and interviewed zookeepers about their processes. The space needed for each animal's habitat is based on government guidelines.

While management sims can lead players to ruthlessly min-max in the pursuit of efficiency, the emphasis here is on creating a "modern zoo" – a phrase we hear multiple times during our visit to Frontier's new HQ. Conservation and education will be as much a part of the management game as maximising profits, we're told, although how players will be incentivised to be good zookeepers remains a little unclear. It shines through in the overall feel of the game, which is relatively gentle – certainly in comparison to *Jurassic World Evolution*. Forget to complete the wall around an enclosure and, while animals will escape, they won't then start chomping on visitors. The game will model alpha hierarchies inside a species, and fights can break out – we're shown a remarkable dynamic scarring system – but these are unlikely to be fatal.

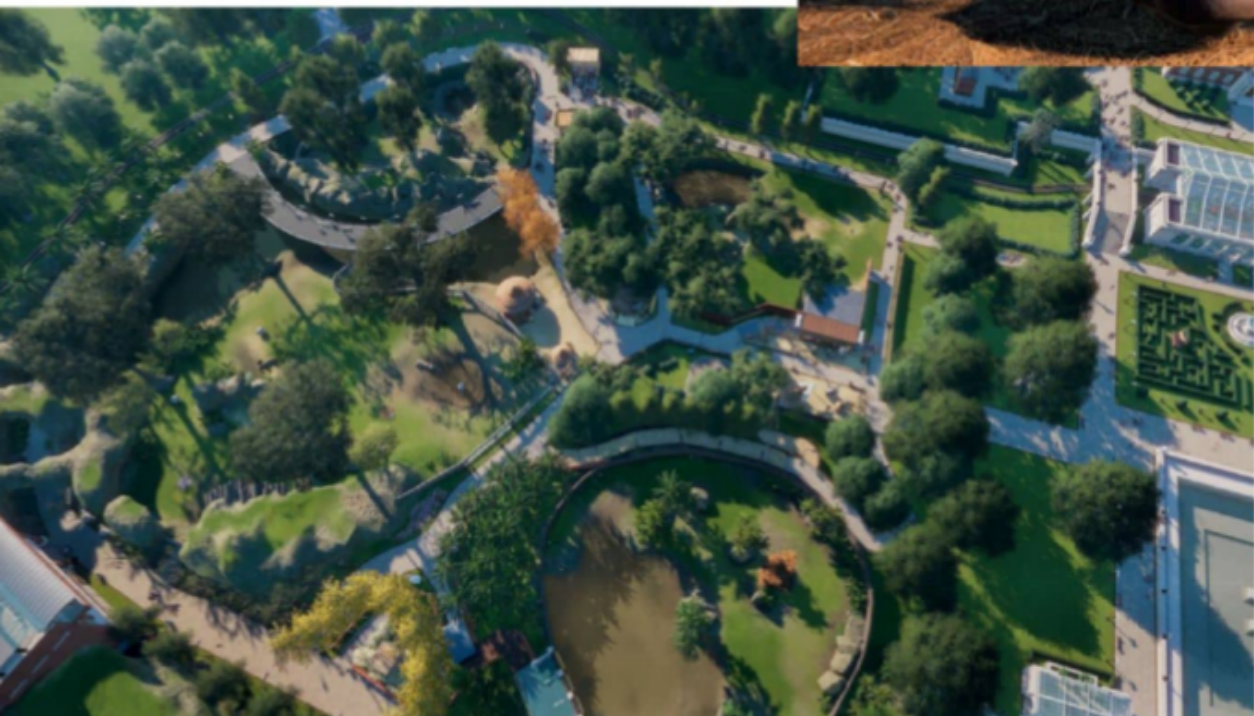
When we ask what happens if you were to put carnivores and their prey in the same enclosure, the team seem taken aback at our bloodthirstiness. The answer is that, yes, predators will eat their cohabitants – but it comes with an implied question of why anyone would even want to do that. This reaction is indicative, perhaps, of Frontier's dedication to making these feel like living, breathing animals. (Literally, in the latter case, with respiration being another procedural animation applied to each species.) The studio isn't denying that nature is red in tooth and claw, but realises this isn't what people want to see on a nice family day out at the zoo.

This, ultimately, is what the development team is trying to achieve. While theme parks are all about interaction and thrills, zoos are by their nature more passive. It's the natural divide between the two halves of the park-sim subgenre, but in both cases, a major part of the pleasure is just sitting back and enjoying the fruits of your labour. So it's a good thing that *Planet Zoo*'s virtual animals are about the most convincing we've ever seen. ■



Pet sounds

It's not just the way animals look that matters. Sound plays a huge part in bringing them to life – just look at those Attenborough documentaries, which somewhat controversially dial up the post-production sound effects so that lions clash with the boom of gunshots. Frontier's audio department, led by Matthew Florianz and Jim Croft, subscribes to the school of hyperrealist sound design. That means recreating sounds as realistically as possible then boosting them so they're more audible to the player. The sounds that can't be sourced from a library are recorded at an in-house Foley facility, where paws on grass are imitated with boxing gloves punching an artificial Christmas tree. The result is a zoo that feels authentic, without slavishly sticking to reality. Which is good, as we don't need the sound of kids yelling from our PC speakers.



TOP Want to learn more about a particular species? An in-game 'Zoopedia' will offer unlockable nuggets of wisdom from the research Frontier has commissioned.

RIGHT Each family of animals will have its own genome, affecting physical features and size as well as more mechanical concerns such as longevity of life, fertility and immunity to disease



TOP The perfect habitat will combine assorted surfaces based on the requirements of that particular species, as well as behavioural enrichment toys to keep animals stimulated.

ABOVE Zoos can be built in a variety of biomes, from savannah to taiga to tundra, which will impact the common weather conditions and happiness of animals. Timber wolves love snow, but lions? Not so much.

MAIN For now, Frontier is showing off zoos built with the Longleat-esque 'classic European' tileset, but it's working with Geogrify to help ensure authenticity and sensitivity in how it portrays other regions

H | Y
P | E

DICEY DUNGEONS

Super Hexagon's creator rolls to hit
with a six-sided Roguelike

Developer/publisher	Terry Cavanagh
Format	PC
Origin	UK
Release	2019

At first glance, *Dicey Dungeons* seems like it could have been made as a physical tabletop game. The whole thing is built around a few components and a simple concept: rolling a fistful of dice, then assigning the results to your arsenal of equipment. The latter are two-dimensional blocks with slots for placing dice on – the kind of thing you could easily imagine scrawled or printed onto scraps of paper. But after a few rounds, as the game starts to twist that concept, it nimbly justifies its existence as a videogame.

It's worth noting that *Dicey Dungeons* was never prototyped on paper, never considered as a potentially physical game. The game first grew out of developer **Terry Cavanagh's** participation in the Seven Day Roguelike Challenge last April. His inspiration at the time was the 2014 iOS game *Dream Quest*, a Roguelike deckbuilder which, like *MegaCrit's* card-based Roguelike *Slay The Spire*, sent the player into a dungeon armed only with the cards they found along the way. As he experimented, Cavanagh discovered a new twist on the formula.

"I happened upon this idea of 'you assign dice to cards' really early," he says. "It's one of these chance game-jam things that you can't really plan for. But once you see it, it becomes

absolutely bafflingly obvious that, of course this works, there's a bunch of depth and cool ideas I can get out of this."

Within that idea, *Dicey Dungeons* has managed to carve out a vast design space. Some equipment is straightforward: place a five on it to deal five damage, or a two to deal two. Others come with a minimum or maximum value attached, or will only accept odds or evens, meaning some rolls are entirely useless. Luckily, other equipment blocks feature a countdown – a large figure that would be impossible to roll in one go but carries across between rounds, meaning it can be chipped away at by dumping in any unwanted dice.

All of this equipment, from swords to healing crystals, is gathered in classic RPG fashion: by descending deeper into a dungeon, finding and buying items as you go. As in any good deck builder, it's all about finding unexpected combos and synergies in the hand you've been dealt. Or, in this case, rolled.

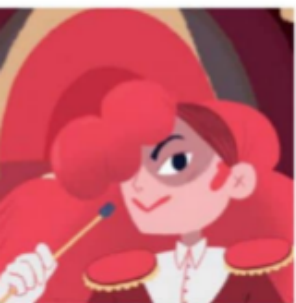
"Once you start combining dozens of these different types of equipment with your dice rolls, it gets interesting very quickly. The game becomes this constantly changing mini-puzzle of figuring out how to most effectively use what you've randomly rolled," Cavanagh says. "It's this basic thing that's



Dicey Dungeons is presented as a gameshow, hosted by Lady Luck herself, who – appropriately enough – wavers between being an eager host and a more malevolent force seemingly at random



DICEY DUNGEONS



incredibly compelling, and that worked almost right away."

At the end of the seven-day game jam, Cavanagh put out a very early version of the game online. He started to update it weekly – stumbling into his first early-access project almost by accident – and has spent the past year finding new ways to tinker with the core premise. Primarily, by adding new characters. There are now six, each of which Cavanagh describes as "a remix of the rules".

Take the Witch, Cavanagh's personal favourite, who has to spend dice rolls to summon her equipment from a spell book, building a new engine for every single encounter. Or the Robot, probably the best example of how much the characters can rewrite the rules of the game. Instead of rolling a set handful of dice like everyone else, the Robot plays a game that's closer to

There are six characters, each of which Cavanagh describes as "a remix of the rules"

blackjack. You start with no dice, and request them one at a time, working towards a set jackpot number. Hit the number exactly, and you'll receive a bonus. Exceed it, and you're bust – all equipment is deactivated, leaving you with a pool of useless dice. The Robot, with a bespoke interface reminiscent of a slot machine, turns *Dicey Dungeons* into a game about pushing your luck. Will you pull the lever one more time? It's one of those questions that proves endlessly, troublingly compelling.

The game is broken up into episodes, quick dips into a randomly generated dungeon with six floors and a boss at the bottom. It's a condensed version of the usual Roguelike structure – in the game of *Dicey Dungeons*, you win or you die, but either way it'll never take more than half an hour. "I want to make a thing that people can just sit down and play for 20 minutes when they feel like it, and it's always different, there's always something new to see," Cavanagh says. This latter goal is one he's trying to meet even for those players

who end up spending hundreds of hours in *Dicey Dungeons*.

Which is where the episodes come in. In the final release, there will be six for each character (you'll notice that six is something of a magic number in *Dicey Dungeons*, for reasons that may be obvious). Every episode comes with its own set of rules skewing how that character works – a remix of a remix. "If you think of each character as one particular design tangent, then the way I'm exploring those tangents is to have modified versions of each character's rules," Cavanagh says.

As an example of how these episodes work, let's return to the Robot. In one variant, instead of pulling that lever, you can request specific dice – ensuring you'll get the result you want, and never go bust. But each request comes with a 50 per cent chance of failure, which will disable a random piece of your equipment. It's a new flavour of push-your-luck mechanic, built around a different kind of chance: rather than a dice roll or slot-machine wheel, a simple coin-flip.

Once the game is complete, there will be 36 episodes in total, including one per character that includes randomised rule changes, plus a final joint episode featuring all six characters. It's all part of that effort to make *Dicey Dungeons* endlessly replayable, something Cavanagh is hoping to bolster with comprehensive mod support.

"I worked with [Level Up Labs'] Lars Doucet using his Polymod library to enable atomic modding for the game, so you can go in and add scripts and elements for any equipment or enemy or background or generator and just run that piece of code," he says. "I'm really excited to see what people will eventually do with this – hopefully we'll see some crazy total conversions."

Since the initial prototype was finessed into a playable shape, the focus of *Dicey Dungeons*' development has been finding new ways to tweak and occasionally even break its rules, creating dozens of versions of the game that effortlessly reshuffle themselves. The basic components might still fit on an airline tray-table, but *Dicey Dungeons* as a whole has grown into something deceptively huge. ■



No dice

"One of the nice things about making a deckbuilding game digitally is that it removes a lot of the faff of moving pieces around and keeping track of things, which allows you to explore complicated things that would be a complete pain to do by hand," Cavanagh says, when we ask if he ever considered applying the design to a boardgame. "A non-digital version of *Dicey Dungeons* could absolutely work, but for it to be any good at all, I think, I'd have to sit down with the idea from scratch, and try a fundamental redesign of some core parts of the game. I don't think you could do a 1:1 port that would be fun to play – you quickly get situations in the game that are just too fiddly to do manually."

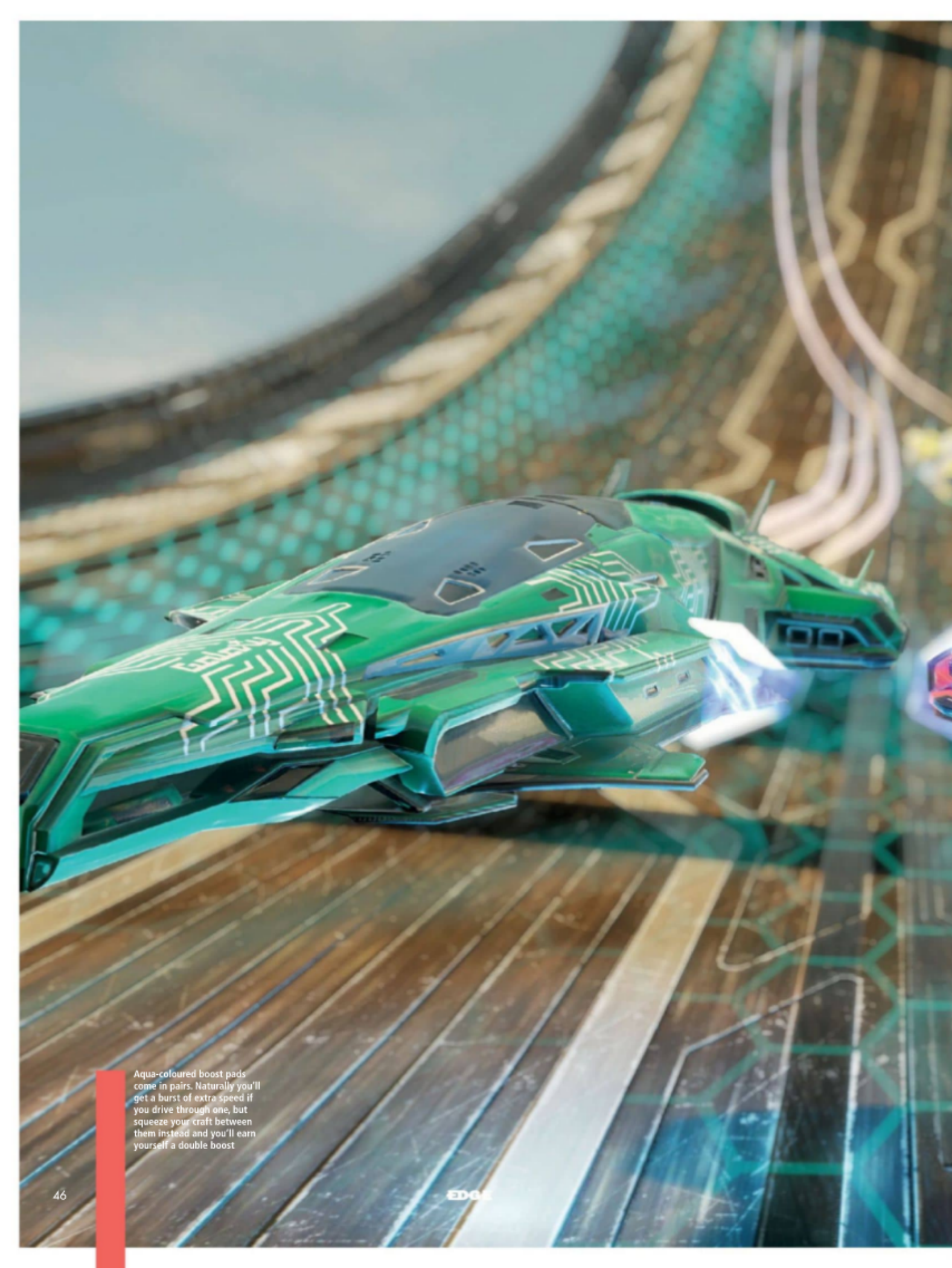


TOP Currently, the six characters – Robot, Jester, Witch, Warrior, Thief and Inventor – and their episodes can be played in any order, but the final game is likely to have a more traditional progression system.

ABOVE There's a certain amount of inventory Tetris involved in managing your equipment: more powerful gear means bigger blocks, which have to be squeezed into a limited space



TOP Each enemy has their own set of dicey equipment. The Alchemist has four potions on countdown timers, which eventually transform her into a bear. ABOVE Each floor of the dungeon contains a randomly generated selection of enemies, health-reviving apples, loot chests, shopping carts and anvils that upgrade equipment. LEFT As well as dice-based equipment, each character has a special ability. The Inventor destroys a piece of gear after every encounter and turns it into a gadget

A detailed illustration of a futuristic racing car, primarily green with blue and black accents, featuring circuit-like patterns. The car is positioned on a track with glowing blue boost pads. In the background, there are large, curved structures and a blue sky. The overall style is high-tech and dynamic.

Aqua-coloured boost pads come in pairs. Naturally you'll get a burst of extra speed if you drive through one, but squeeze your craft between them instead and you'll earn yourself a double boost

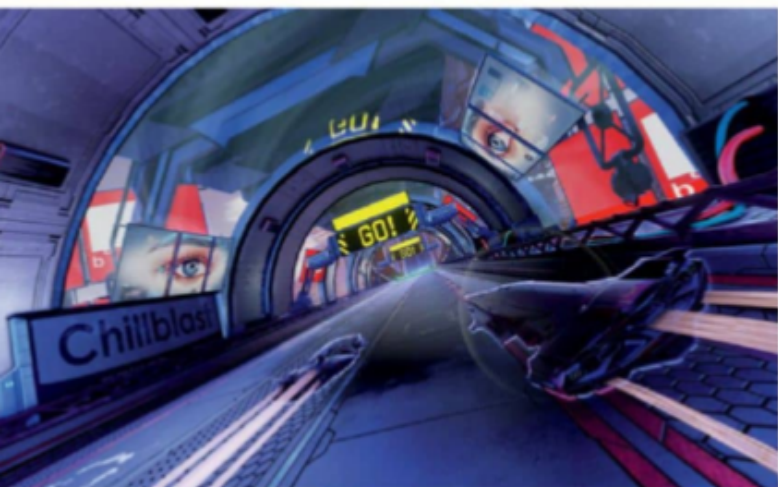


H | Y
P | E

PACER

R8's anti-grav racer gets back on track

Developer/publisher	R8 Games
Format	PC, PS4, Xbox One
Origin	UK
Release	2019



TOP Air brakes on the left and right triggers help ease you around the game's tighter corners. Now where have we seen that before?

ABOVE Online races will support up to ten players. The host picks the ship class and the rules.

ABOVE LEFT Weapons can be further customised, with equippable cards adjusting their respective behaviours.

LEFT In Endurance races, the player who travels the furthest wins. The twist? Your health depletes after the first lap



PACER

Lots of science has gone into making *Pacer*'s sleek anti-gravity racing cars glide so effortlessly over the dips, banks and loops of its intricate tracks. The fiction behind R8's futuristic racer suggests that by 2075, quantum levitation tech has become sufficiently advanced as to allow these elegant craft to be suspended above the tracks via nitrogen-cooled superconductors. Meanwhile, magnetic buffers along the sides help cushion collisions with the walls – a real necessity when we're playing.

The game, too, has required plenty of invisible work to get it up to speed. The PC build we play runs at an unwavering 60fps, and we're assured the same is true of the console versions. We're promised more visual effects will bring these tracks to life – currently they are indeed a little static – but that framerate is non-negotiable. With vehicles this nippy, the extra responsiveness is essential for negotiating sharp corners without hitting the sides, and for avoiding collisions with other racers. And, for that matter, dodging the projectiles they fire and the mines they drop, though the weapons here currently lack impact: a fix producer **Steve Iles** tells us is at the top of his to-do list.

If *Pacer* looks familiar, that's because it isn't strictly a new game, but rather an old one rebranded. It used to go by the name *Formula Fusion*, and was successfully Kickstarted four years ago before its Early Access release received what could politely be described as a mixed response. It certainly looked the part, but that's no surprise given the talent behind it. R8 Games was founded by a group of disillusioned devs formerly at Psygnosis before it was subsumed into Sony; alongside graphic design studio The Designers Republic, responsible for the distinctive aesthetic of the *WipEout* games, it was hoping to recreate the studio's golden age.

Evidently that didn't work out, and so Iles arrived in September last year to put things right. Alongside lead designer **Carlton Gaunt**, he's overseen a complete overhaul of the game alongside the rebranding. "It needs to be driven by stable technology," he says. "That meant gutting the entire thing and rebuilding from the ground up – not only to make for a

better experience for the players, but to make it easier for us as a development team to forge ahead and use bolt-on technologies in a modular fashion rather than trying to hack this thing together. Really, we've got the guts of a brand-new game."

Even if you played *Formula Fusion*, he suggests, this won't just feel like a DLC expansion to the earlier iteration. The AI has been rebuilt from scratch, the physics reworked and the user interface refreshed. There are now 14 tracks compared to the original's eight, and with day and night versions of each (not to mention mirror and reverse options) you've got plenty of variation within individual courses. The vehicles, too, are customisable: there are multiple skins to unlock with the prize money you earn from each race, with cards letting you fine-tune a vehicle's specifications beyond its preset stats. You can trade shields for raw speed if

The AI has been rebuilt, the physics reworked and the user interface refreshed

you're confident of dodging missiles, or acceleration for brake power for the twistier tracks. "One thing we want to provide that you don't see elsewhere is that expression of yourself as you're racing," Gaunt says. "Everything about how your craft handles, how your weapons fly, how you interact with others, is yours. That's not just something that *WipEout* didn't do, it's something *Redout*, *F-Zero* and *AG Drive* didn't do."

While Iles insists it's no clone of Psygnosis' racer, it's not unkind to suggest that *Pacer* is to *WipEout* what *Dangerous Driving* was to *Burnout*. That's no criticism; there are plenty of people out there who'd quite like another *WipEout* game, after all. And for those among us who've never quite managed to get to grips with the series' idiosyncratic controls, its extra options are certainly welcome – even with a handling model that already feels a little more generous and nuanced than its inspiration. We're no longer quite so well-acquainted with those trackside buffers, at any rate. ■



Zeroing in

Iles acknowledges anti-gravity racers have relatively niche appeal, just as he's aware comparisons with *WipEout* won't necessarily do *Pacer* any harm. But he's keen to emphasise the differences between the two games, believing they might help widen that niche. "It's a lot deeper, gameplay-wise, than *WipEout*," he says. "When you unlock a ship in *WipEout*, what you've got is what you've got. With us, you have that whole upgrade path where you're making the ship your own: you can apply skins, upgrade your ship, your weapons, and so forth." He's been struck, meanwhile, by the very different response the game has received at press shows in the US: "They all talked about *F-Zero* on GameCube as the last anti-gravity racing game they'd had. There's definitely a market for us to tap into in America that *WipEout* never really addressed."



Developer Honig Studios
Publisher HandyGames
Format PC, PS4, Switch,
Xbox One
Origin Germany
Release TBA



EL HIJO

A Western game with neither red nor dead

When a story introduces itself as a Western, there are a few elements you're probably expecting. The hats, the horses and, perhaps most inextricably, the guns. But *El Hijo* promises a Spaghetti Western without weapons — or indeed violence of any kind. It's a stealth game where you play a small child, evading capture by grown-ups using your hide-and-seek skills and an arsenal that, even when it swells to include a slingshot, is used entirely for distraction rather than destruction. This approach goes both ways: get caught and, thankfully, you don't have to watch the child suffer — they'll just get picked up by a chastising adult and sent back to their room, or the nearest checkpoint.

So what does a Western without those trademark gunfights actually look like? Well, to start, rather lovely. *El Hijo* captures the Italian and Spanish locations that stood in for the Old West in just a few brushstrokes — all the dusty edges of those scrublands and derelict chapels smoothed away into blocks of terracotta. It helps that Honig Studios' influences stretch beyond the more traditional gunslinging examples of the form. "The original inspiration was *El Topo*, the movie," lead developer **Stephan Schüritz** tells us. "We liked the relationship between the son and the father, so we built our plot around this — but where the movie is more artistic, our version is more fun and playful."

El Hijo doesn't share the surrealist vibe of Alejandro Jodorowsky's so-called 'acid Western'; but otherwise it's not shy about the connection. Like *El Topo*, the game opens with a child — in the film, named only as 'El Hijo', literally 'the son' — burying a toy and picture of his mother in the desert sand, before being handed over to the local monastery. Schüritz is hoping to blend



this inspiration with "funny Spaghetti Western clichés" and a soundtrack evoking the whistles and harmonicas of Ennio Morricone's iconic Dollars Trilogy scores.

As for why Honig chose to take the pacifist route, Schüritz says: "For us, violence was always an easy solution for games — it's really a clear-cut thing to say 'you're dead' — but we wanted to not always use blood as the

ABOVE Most of the areas we explore are working in a single palette, but the monastery interiors have an added mustiness that make escaping into the sunlight feel like a genuine reward

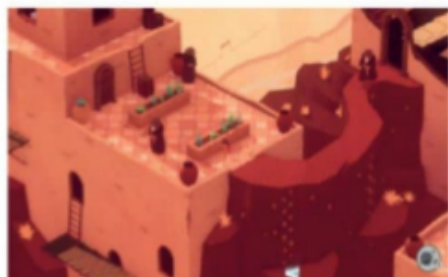
The lack of violence doesn't mean a lack of challenge, just a relocation of it

final goal, which also makes it more accessible for a younger audience." He clarifies that, despite Honig's background making kid-friendly games and apps, *El Hijo* isn't aiming for an audience the same age as its protagonist. Which is to say, the lack of violence doesn't mean a lack of challenge, just a relocation of it.

Without stealth takedowns, or prone bodies to drag, *El Hijo* is a game of observing



LEFT In the early stages, the main threat are monks, who grumble if they spot you. But functionally, it's no different to being chased by a guard. **BELOW** One way *El Hijo* guides you is through the placement of checkpoints. A blue glow at the bottom of the screen is a hint that you can climb down the rock



ABOVE Throwing stones is one way of distracting guards, but it's not necessarily the only way to pass each area. More stones can be collected through exploration, making your life easier down the line

patrols, of gauging the distance between hiding spots, and of holding your breath while you dash between them, hoping that one guard won't turn around before you can duck safely behind a curtain. This isn't just a throwback to the Spaghetti Westerns of the '60s, but also to early stealth games. It's been a while since we've hugged the shadows so enthusiastically in a game, grateful for their near-mystical cloaking properties. The guards stick tightly to their clockwork routines – even throwing a stone or triggering a peal of chapel bells with your slingshot will only send them off course briefly, before returning to their patrol –

and once spotted, you're all but doomed to a checkpoint restart.

El Hijo's approach to stealth feels a couple of decades removed from where the genre is now. Over the course of hours, that could feel restrictive – a lot of the visual appeal of Spaghetti Westerns, after all, comes from those wide-open plains – and we're told the game will open up as it moves from monastery to desert and finally city. But in our short time scampering between shadowy nooks and conveniently child-sized pots in the opening levels, it's refreshingly different. After all, an adventure without any violence whatsoever is almost as rare in games as it is in cinema. ■



All quiet

El Hijo is attempting to tell its story and introduce its mechanics without a single word. It's another attempt to make the game widely accessible, Schüritz tells us, and to keep its storytelling pacy and engaging. When this works, as in *Rime*, *Inside* or *Journey*, it can add to the sense of style – and *El Hijo's* visuals, which are perhaps closer to an animated film than a Western, certainly have enough flair to hold your gaze – but the developer is still in the process of figuring out how to best communicate ideas to the player silently. The current plan is to draw the player's eye using highlights – an abstraction, but one that fits nicely with the game's focus on light and shade.



ROUNDUP

BORDERLANDS 3

Developer Gearbox Software Publisher Gearbox Publishing Format PC, PS4, Xbox One Origin US Release September 13



We declined our invitation to *Borderlands 3*'s grand unveiling in Los Angeles – a long-haul trek followed by a day of gameplay and interviews, an embargo the following morning and the return flight a few hours later isn't really our style. Still, we're almost sorry: this looks the business, and is drawing smartly on the games its predecessors inspired. We particularly like an invisible difficulty slider that lets pals party up regardless of character levels, but that's just the start. This is a game brimming with ideas, as well as all those guns. Gearbox has a patchy record with keeping promises, sure, but this is a fine start.

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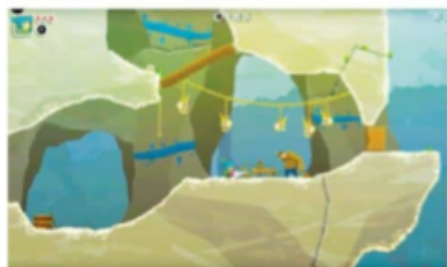
Developer Sharkbomb Studios Publisher No More Robots Format PC Origin Germany Release Summer



The latest answer to the question 'What would *Hearthstone* be like without all the terrible people?' comes from No More Robots, the upstart publisher behind *Descenders* and *Hypnospace Outlaw* founded by former game journalist Mike Rose. Set across a steampunk wasteland, this singleplayer tactical card-battling Roguelike from German developer Sharkbomb Studios may owe a few stylistic debts – to *Fallout* and *FTL*, *The Banner Saga* and *Slay The Spire* – but it already looks like more than the sum of its parts.

PEPPER GRINDER

Developer/publisher Ahr Ech Format TBA Origin US Release TBA



This platformer tells of a girl (Pepper) and her drill (Grinder). Pepper is smaller than even the insects, and so must burrow underground before smacking foes from below. Throw in slingshots for momentum and checkpoints staffed by bears, and *Pepper Grinder* looks anything but boring (apologies).

TAMARIN

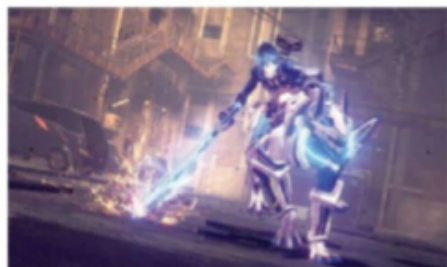
Developer/publisher Chameleon Games Format PC, PS4 Origin UK Release TBA



Stop us if you've heard this before: a group of former Rare developers are making a cutesy 3D adventure. The inspiration this time appears to be *Jet Force Gemini*, with the titular simian gambolling and firing its uzi around a succession of realistic environments. David Wise is on soundtrack duties.

ASTRAL CHAIN

Developer PlatinumGames Publisher Nintendo Format Switch Origin Japan Release August 30



Atsushi Inaba wants Platinum to move away from projects like this – funded by a publisher that retains the IP rights. Takahisa Taura, previously battle designer on *Nier: Automata*, is directing a game for the first time: Platinum says Hideki Kamiya is 'in charge of supervision'. Some baptism of fire.



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Jack Gilson, Rovio



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Leanne Loombe, Riot Games



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Chris Jenner, Ubisoft Reflections



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Ollie Purkiss, Wonderstruck



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Stuart Whyte, Sony London Studio



Code Ahoy - Finding Hidden Treasure In Creating Your Own Audio Systems
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Small wonder

Created with care, for people who love videogames, Panic's dinky handheld is the console no-one saw coming

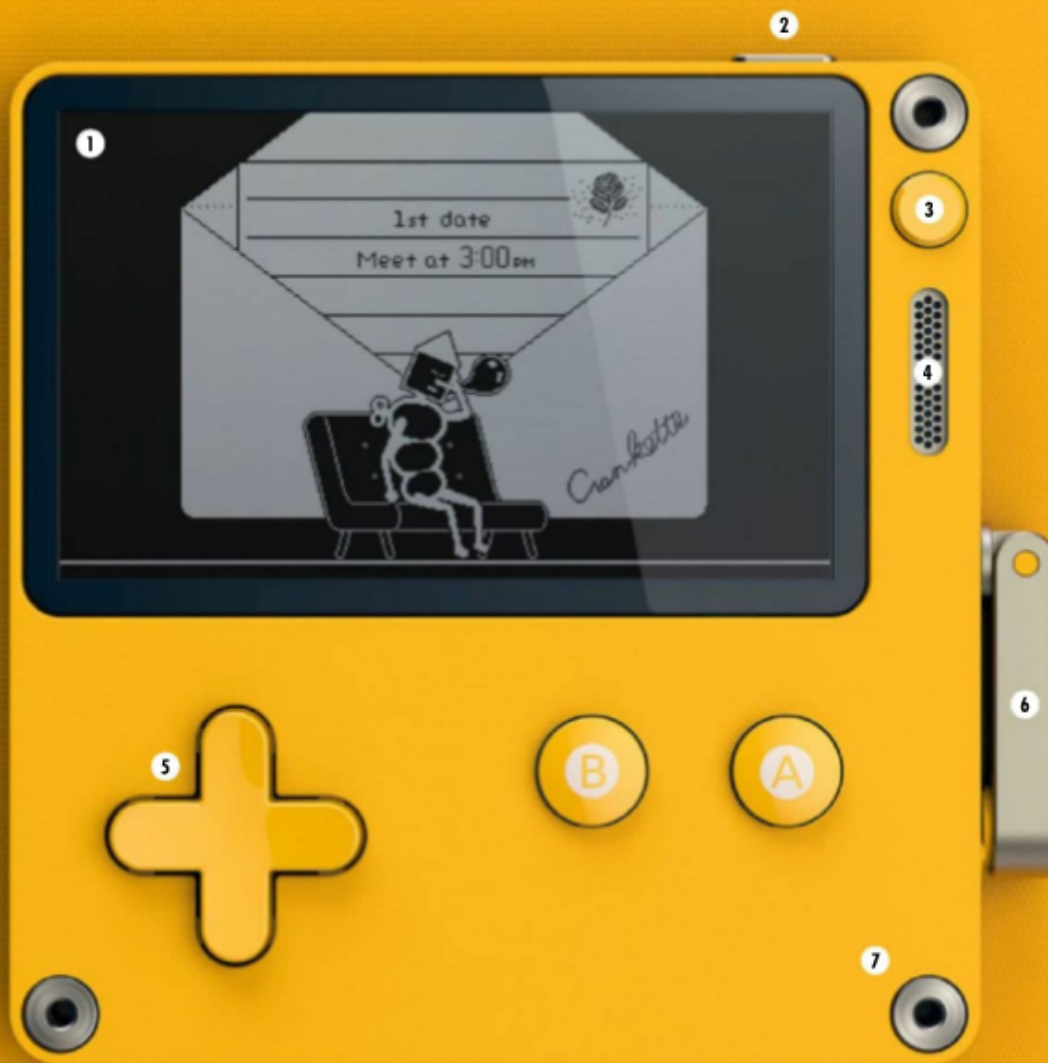
By JEN SIMPKINS

We didn't see it coming either. As Panic Inc. co-founder **Cabel Sasser** leads us through the streets of San Francisco, looking for a place to show us his top-secret project, we're convinced we're about to see a game. A quiet corner of a coffee shop is apparently not private enough, even though we're sure we could hide a screen from view. Then again, Sasser's not carrying a laptop – in fact, he doesn't appear to be carrying anything at all.

Halfway up a nondescript stairwell, it turns out, is the ideal venue to unveil what Panic – maker of Mac and iOS software, publisher of *Firewatch* and the forthcoming *Untitled Goose Game* – has been working on for years. Sasser smiles, and reaches into his shirt pocket.

In a flash of sunshine yellow, out comes a tiny handheld console. It's Game Boy-like, a D-pad and two chunky buttons sitting below a screen. It's perfectly square, however, and remarkably slim. In the hands, it's pleasantly weighty. There's a softness to the matte plastic shell, which we can comfortably grip while clacking the shiny buttons. It feels like it costs money. Little wonder: the hardware, Sasser tells us, is the work of revered Swedish electronics manufacturer Teenage Engineering. ►

We start to laugh. And isn't that quite the point? This little yellow curveball, for all its absurdity, is purpose-built for happiness



1 Playdate's black-and-white LCD screen is 2.7 inches wide, with a resolution of 400x240. It's not backlit: it reflects light for a bright, clear picture. 1bit video looks fantastic on it – Panic is thinking about having dev videos introducing games.

2 A bright notification light indicates the arrival of a new game via WiFi – we're told there'll be a little jingle, too.
3 This button opens a sub-menu in which you can change the volume, take a screenshot or return to the home menu.

4 The powerful speaker. Despite Teenage Engineering's involvement, there's no music software on Playdate just yet.
5 "The D-pad especially has taken a lot of effort," project lead Greg Maletic says. It was a while before they realised

diagonal inputs didn't work.
6 Playdate's crank folds neatly into its side. There's a hard reset button hidden in the groove in which it sits.
7 Magnetic screws can also act as charging points if Panic ever releases a battery pack

Were it simply what it first appears to be – a high-class retro homage to the Game & Watch – it would be surprising enough. This is a week during which we've just seen Google waltz into the game industry with a grand vision for a cloud-based future in which boxes are a thing of the past. Yet here is a man with a portable console of almost belligerent boxiness.

And the surprises keep coming. For all its retro trappings, this is a thoroughly modern bit of hardware. The 2.7-inch black-and-white screen has a resolution of 400x240 – around four times the pixels of the Game Boy's screen. Much like the E-ink screen you'd find on a Kindle, it's not backlit – the difference is that it's tremendously reflective, the visuals wonderfully sharp and clear in the California sunshine. The in-built speaker looks minuscule, but is so powerful that we have to hurriedly hunt for the volume controls, lest any passers-by be alerted to the existence of this bizarre little gizmo.

Then there's the contemporary *modus operandi* that gives the console its name. Every Monday, via WiFi, owners receive a new game, the notification light on top of the case blinking to announce its arrival. Whenever you have five spare minutes, you'll be able to reach into your own shirt pocket, and make time for your Playdate. And these games aren't your basic Game & Watch fare. They're specially crafted titles from such indie superstars as Bennett Foddy, Zach Gage and *Katamari Damacy* creator Keita Takahashi.

It's the latter's game that reveals the last surprise. We boot up *Crankin's Time Travel Adventure*, but now none of the buttons seem to be working. And then we notice the strange metal rod on the righthand side of the console. Sasser gives it a tug. From inside the shell, a diminutive crank pops out. We turn it, and our hero begins to move, in the way only a Keita Takahashi character can move – bouncily, ridiculously, with a lurid array of squeaky sound effects – and we start to laugh. And isn't that quite the point? This little yellow curveball, for all its absurdity, is purpose-built for happiness.

Some time ago, Sasser had a bit of an existential crisis. "Panic grew so slowly and gradually that one day I woke up, and I realised, 'Oh god, we have 20 employees, and revenue is into a million dollars'," he says. "I'm responsible for the livelihood of a lot of people. It definitely snuck up on me. And so I crashed pretty hard. Like, 'can't really get out of bed' hard." Fortunately, his friend and co-founder **Steven Frank** was on hand to help him through it. "We talked a lot. 'Why am I feeling this way? What is happening to me? How do I reboot myself? What are we doing? Where are we going?' And one thing that came out of that conversation was a realisation that we are extremely lucky, and in a very unique position." Panic is beholden to no-one: it doesn't have a board of directors, any investors to please or loans to repay. "There's nobody telling us what we can and cannot do. That is preposterously rare. And I don't think I realised that.

"I feel like that's the true origin story of this device," Sasser continues. "A part of my brain unlocked, and I realised we don't have to always keep doing the exact same thing that we're always doing – this ceaseless development-and-support cycle. We can do some weird things too, as long as we're not betting the farm. And if we have this chance, we should probably start doing some things that can take us to new places. Maybe they'll work, and maybe they won't. But if we're not doing that, we're just wasting our lives. Yeah, so um, that's kind of heavier than maybe you were hoping for," he laughs, "but it's true."

Indeed, Playdate is much more than anyone might initially bargain for. While a niche proposition, it feels vastly of the moment. A standalone portable device that offers a reprieve from the stress of your smartphone; a hand-curated selection of high-quality games; an input method that encourages game developers and players to design and interact in a new way – Playdate's candy-coloured coating may just be the spoonful of sugar that makes the medicine go down. In an industry accelerating towards homogeneity, this is a left turn, designed to remind us of the value of doing things differently. In that respect, perhaps Playdate is not so surprising after all. This feels like it's been a long time coming. ▶



From top, left to right: Cabel Sasser, Jesper Kouthoofd, Dan Messing, Dave Hayden, Greg Maletic, Neven Mrgan, office manager June Ressinger, Steven Frank



Playdate uses an ST microprocessor and has about 2GB of internal storage. Panic is still testing battery life, but we're assured the theoretical duration is long



"We spent about a week just pushing buttons," Greg Maletic says, "and the one that feels the best gets fatiguing after about 30 seconds, so we went with the lighter tension one"



Five years, to be exact. Panic had just gone out on a limb, even by Panic's standards (this is a software company which has dipped its toe into making skins for its virtual MP3 player, and even produced the official T-shirts for *Katamari Damacy*), having agreed to publish its first game, *Firewatch*. "To be totally honest, if *Firewatch* hadn't been successful, there's a chance Panic wouldn't still be here," Sasser says. "It was a big bet. But it felt so good to do something different." The bet paid off: *Firewatch* was a success, selling over 2.5 million copies by 2018. Panic even came up with the idea of allowing players to send off their in-game photos to be 'developed' and mailed to them in real life – and, as it turns out, eventually hiding a virtual model of Playdate in the game. It was an exhilarating time. "In the back of my mind, I was like, we have all these talented people. There's probably nothing we can't do, within reason," Sasser says. "I've always dreamed of hardware – but when you're a software company, it's preposterous to try to pivot into hardware. Like, that's a ridiculous notion. But it's something that we had never done. And for whatever reason, I felt confident that we could try."

The company's 20th anniversary was coming up, and so this hardware project – early ideas included a commemorative clock – could tie into that. And then Sasser found the Sharp Memory LCD screen: black-and-white, high-contrast, harkening back to the original Macintosh, and beautiful. "I have a vague memory of Cabel saying something like, 'Wouldn't it be cool to make a little thing?' And sort of describing it as a shape like this," co-founder Frank says, demonstrating with his hands. "You could tell he was visualising it as an object, and he was saying, 'It could be a little thing, and have some games on it. Could we do something like that?'"

Sasser's earliest idea for Playdate was that it'd be a simple Game & Watch-style toy. Immediately, he called on the talents of in-house engineer (and amateur boat-builder) Dave Hayden. "Dave is the kind of guy that you can just throw ridiculous tasks at," Sasser laughs. "That's really part of the secret, is going to Dave and saying, 'Do you think we could make a handheld game system?' He had basically no electronics experience at that point, but he was like, 'Sure, I could figure that out.' And amazingly, did." In 2015, prototyping began in earnest. Hayden's weapon of choice was a hot plate, liberated from his own kitchen, on which he melted solder for the circuit board.

Panic continued to work on developing and updating its MacOS software, with Hayden occasionally tinkering away on the team's strange experiment in the background. At the same time as the first prototype was coming together, Sasser and team began to consider the software side of their 20th-anniversary project. "It was the era of new streaming video services: Netflix was producing shows, and Amazon was starting to do it," designer Neven Mrgan says. The services were releasing all episodes in a series at once. "It sucked the fun out of it. You just got this bucketful of content, and then it's gone the next day, and the conversation is over. So that led, I think, to the season idea: what if there was something new every week?"

Hayden 3D-printed a rudimentary shell for the circuitry, and it could play an LCD game (you delivered files as Panic's Transmit truck). "But then a week later, it changes to another LCD game," Sasser says. "And you're like, wow, there's multiple games on here!" The problem, however, was that Game & Watch-style fare didn't stay fun for very long. If they were going to sell these devices to Panic's supporters, they wanted them to get their money's worth. "And that was the huge leap mentally to, 'Well, maybe this thing just plays real games.'"

Gradually, more and more of Panic began to get involved with the project. Slowly but surely, it started to become real. "Budget-wise, it was deceptive because we moved so slowly and steadily that it was never a huge strain on resources," Sasser says. "It's like, oh, it's just Dave and Dan [Messing, engineer], and he's got the hot plate and it's not costing us a lot." They would constantly evaluate whether they had enough money to continue their pet



Shaun Inman

What were the programming challenges with your game?

It was my first experience using Lua. It's simple, but it's really flexible. But I ran into these problems with garbage collection – because Lua is a scripting language, it's all garbage-collected. That's tricky in games, because the collector triggers at random times, and you don't know how long it's going to run for.

So you ended up having some issues with performance?

Exactly, yeah. I ended up moving my games over to C, and wrote a superset that enabled me to just squeeze so much more performance out of the hardware.

What ideas did the crank inspire?

There's one game that I built that has a road-trip aesthetic. And when it's game over, you can crank backwards through the map that you've travelled to see all the different destinations you visited. There's been talk of like, tuning a radio using the crank.

But it was a year-and-a-half before I actually had that in hand to try it, which was a challenge. There's a simulator that helps you test your games on Mac. I used a PS3 and then a PS4 controller with the crank mapped to the right analog stick. Those analog sticks are covered in rubber, and rolling it around in a motion to simulate the crank ripped off all the rubber.

What's it like working with Takahashi on Crankin's Time Travel Adventure?

When Cabel approached me about it, I was like, wow, this is amazing, but really intimidating [laughs]. It's kind of a hard game to wrap your head around: it's an animation that you control the speed of, but then there are elements that are independent of that animation that you need to work your way around. There are two timelines.

So I said, 'I think I want to do this, but let me prototype it first and see if I can actually deliver the code.' I built a level editor for it, so Keita can put together those animations with a little WYSIWYG tool. I spent a couple days doing that, and then I was more comfortable.

"In the back of my mind, I was like, we have all these talented people. There's probably nothing we can't do, within reason"



"One of the problems was it all happened way too easily," Dave Hayden says. "Within a few months, we had something you could hold in your hand and play. So we thought, 'It's gonna be easy'." Within a week, they had something on screen: a few weeks later, there were working buttons. We're shown a plastic bin of prototypes, from janky 3D prints to black and transparent cases. Should Playdate sell well, Panic may consider alternative colourways



SMALL WONDER

"We don't have to make this thing be like everything else. Jesper definitely has that vision when it comes to hardware"



"Getting the overall device thinness down to where TE was hoping was a challenge," Maletic says. Panic had originally expected it to be around twice as thick as its current 9mm body. "Then Stephen, our production engineer, took over the mechanical engineering and refined a bunch of stuff," Hayden says



project without endangering the livelihoods of their employees. "I mean, it's probably laughable to professional businesspeople that this is basically the extent of our financial planning: we open up the bank website, see the amount that's in the checking account, and say, 'Okay, I guess we can keep going with this,'" he laughs. "That is something, of course, that I did often. And there were definitely junctures, especially when manufacturing showed up, where it's like, 'Oh god, this is real money now.'"

The end of 2016, he estimates, was the point at which they were "crossing the Rubicon". It was time to get serious. Hayden could build a board and the team could write code, but they were missing two pieces of the puzzle: mechanical engineering and industrial design. Sasser secured a meeting with the CEO of a local, well-known industrial-design company, bringing Hayden and Mrgan along with him. "We showed up in a conference room, and they had brought in consultants. And so I started to pitch this idea, excitedly and animatedly." The response was overwhelmingly negative. "The first question from the CEO was, 'Do you really think anyone's going to buy this?' I was like, 'I'm not sure. But it's something we really want to do, if you can help?' And then the consultants were like, 'It's going to cost you, bare minimum, a couple million bucks to even remotely get this thing off the ground.'"

Mrgan had anticipated something like this. "Everyone was wearing slacks and dress shirts in the office. I mean, I know that's such a clichéd way to like separate companies, but that's the kind of company it was." They bragged about manufacturing products for casinos, which he found distasteful. "It was very much, unless we were making the next register checkout system that was going to be sold to Safeways across the US, then we were joking, and we were wasting their time. We were never going to make this, and we should just 3D print it and put it on Kickstarter. Like, 'Why are you even trying this?'"

Sasser's reaction quickly turned from terror – perhaps this was a bad idea – to anger. "It was one of the only times in my life that I felt like leaving a meeting. Maybe they were right. But all I could think of was, 'I know those things that you're telling me, we know that this is a weird idea and a wild adventure. And although we're pretty confident it will find an audience, there's a very good chance it won't.' It was a demoralising time, but it also lit a fire under Sasser. 'I remember returning to the office, sitting and thinking, who makes things that have the spirit of the thing we want to make? You can tell when a product is made by people who care about the thing, rather than by a corporate decision about the marketplace. This is not, 'Q4: get into handheld gaming', or whatever – we just want to put this thing into the world. And of all the stuff that I had come across and owned personally, Teenage Engineering was the company that most felt like that to me."

Sasser has always loved Teenage Engineering's synthesizers and sequencers, beautifully designed bits of kit in which the makers would often hide videogames. He had no real connection to the company (at least he thought not – he would later realise that he was one of the only people to buy a box of merch for NetbabyWorld, a Shockwave game site that Jesper Kouthoofd, one of Teenage Engineering's founders, had worked on. The same font on that box is now the Playdate font). But he sent an email anyway, and eventually got on the phone with Kouthoofd. "I gave my extremely excited, rambling speech about this handheld system. There was this long silence, and Jesper's like, 'Well, can we make a game for this thing too?' I was just like, 'Yes! You understand me! Those other jerks, they didn't understand! But you understand!'"

In fact, Kouthoofd understood what Playdate should be so well that he almost instantly added one of its defining features. "Jesper emailed his very first render concepts of what this thing could look like, and there was a crank on the side that we had never seen before," Sasser laughs. "That was an incredible inspiration. Like, we don't have to make this thing be like everything else. Jesper definitely has that vision when it comes to hardware. We're software ▶



Bennett Foddy

What interests you about the crank?

Rotary control is something that has just been gone, I think, from games, where it used to be a big deal. Atari 2600 shipped with paddle controllers. But there are so many games kind of yearning for a rotary controller: twin-stick shooters, golf, any driving game. So it's kind of this dead branch of the evolutionary tree. But it had so much going for it. It's sort of expressive of a desire for people to make new types of games.

Why doesn't your game use it?

This is one of the things that happens when you get on board with a hardware thing early. When I got on board, it was just a screen that couldn't update all that often. Old LCD screens, they don't have the fastest refresh rate. And I thought, I'm probably going to need to do something that's a little bit more slow-paced and less of an action game. But they've been kind of iterating this thing now for years, and it now absolutely can support action games. But that wasn't true when I started.

What are you most excited for upon the console's release?

I love the Pico-8 scene, but if I want a portable version of that, that just doesn't exist yet. I think the scene for free homebrew games on this device is going to be absolutely amazing.

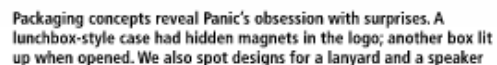
It feels purposefully countercultural, doesn't it?

That's what the crank is there for, I think. It's a position statement. You can't see that and not get a sense of rebellion and lightheartedness. It's like a little arm waving hello, or a flag that's popped up on a mailbox. The Wii did this as well, in its own way. There was no way to escape the fact that it was contrarian.

We've standardised around two hardware platforms: the touchscreen, and ten buttons, two analog sticks. That's got its benefits, but you miss out on novel experiences. So yeah, there is something that is kind of punk about it, and that yellow case. It's like friendly punk.

It was a giddy, strange time at Panic. iOS showed up, and the company was branching out into apps for iPhone and iPad. It took a lot of work, and the apps were far from successful, which was scary. "And suddenly we were finding ourselves in a weird position of no longer being able to do whatever we wanted, which is why we got into computers in the first place," he says. "We could have had an idea for an amazing iPhone app, but it'd have been against the rules, or we literally couldn't build it. And all of these things are happening while we're building this device, where we have total control and the sky's the limit, and it's real software *and* something physical. To feel both these things happening at the same time... it's very hard to keep that balance. But we did. And a number of times, Steve and I told ourselves, worst-case scenario, we learned something new. We've got an interesting Wikipedia page, whatever. But in our hearts, we want this thing to be cool and great. And we want people to love it."

They began to imagine a dream sequence of games from their favourite developers, pinning up cards on the corkboard: names such as Terry Cavanagh (sadly, too busy to take part in the project), Bennett Foddy and Keita Takahashi. Panic's work on *Firewatch* had positioned it well to pitch to some of its creative heroes. "We'd proven we were semi-capable of doing things," Sasser laughs. "But the thing that blew me away, and this is a testament to these game developers, was that we came at them out of the blue with this wild thing, and they're immediately excited by it. I'm sure they had some reservations in the back of their mind. 'How many people are really going to get to play my game? Is this really going to work?' The same things that we felt the whole time – but it didn't stop them from diving in. ►





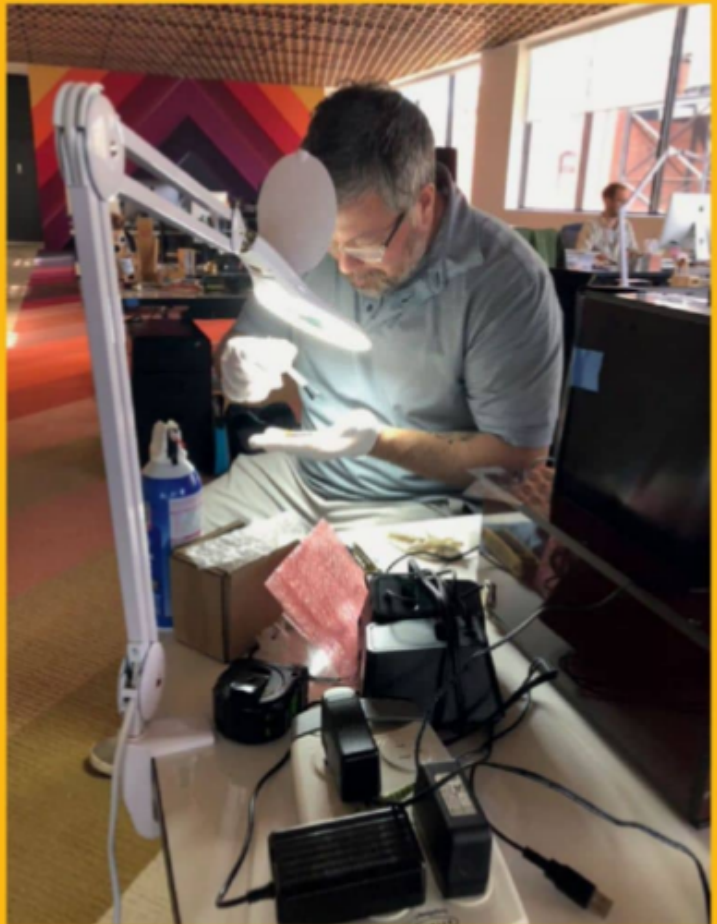
Panic was founded and fully self-funded in 1997 by Sasser and Frank. Its offices are located in Portland, Oregon; the interior was inspired by Louis Kahn's Yale University Art Gallery and Disney's Epcot Center



"We were spurred on by seeing the rise of little hardware project kits: Raspberry Pi, Arduino," Frank says. "It's becoming more accessible just as software did decades ago."



The list of developers making games for Playdate's first free season comprises some of the indie dev scene's best and brightest



The Malaysian factory that manufactures the devices recommended thorough environmental tests. "So we went up on the roof on a hot summer day, took a Tupperware bin, loaded it up with Playdates running a high-performance graphics test, and just let them bake in the sun," Sasser laughs. "The most low-tech testing facility you can imagine. We went up at the end of the day, and all of them were operating perfectly after running at 30fps in 100-degree weather"

And once they learned about the crank, then a billion ideas just poured out of their brains immediately."

It was the next source of great inspiration: letting these world-class developers loose on Messing's SDK, on a 1bit screen, on the crank, and watching what they came up with. Takahashi, naturally, was immediately enamoured with the bizarre little input method, developing a game with crank-only controls. With Inman's help on the programming side of things, this would eventually become *Crankin's Time-Travel Adventure*, a game in which you turn the crank to jog the perpetually late Crankin to meet his long-suffering date. The faster we crank, the quicker he runs: when we turn the crank the other way, time reverses and so do Crankin's movements. In this way, we're able to dodge obstacles (butterflies, rampaging pigs, the inevitable sentient pile of faeces) by positioning him at advantageous points in time. When hanging from a bar with his body stretching into pieces, darts fly safely through the gaps, for instance. It's delightful, a silly yet sophisticated feat of analogue control engineering and programming, something akin to indie darling *Braid* or the more recent *The Gardens Between* – the only game Takahashi played in 2018, apparently, after noticing it did similar things with time manipulation.

This is no mere Game & Watch fodder, then. "A lot of the game developers, of course, are perfectionists," Sasser says, "and don't want to show their work until it's further along." Panic would trust them to do their thing, and then months later see an unexpected animated GIF of a particular game pop up in their Slack channel. "Chris Makris was someone that Neven was aware of who was making really cool games – he showed up with a game that was in a genre that I don't think we even imagined, and had this beautiful hand-drawn art that was beyond anything that we had created. And that was one of those moments where the GIF arrives and we're all popping up from our desks, looking at each other, like, 'Oh my god, you've got to refresh this right now!'"

The list of developers making games for Playdate's first free season (12 games in total) comprises some of the indie dev scene's best and brightest. And although we've been permitted to reveal some of the names, we've been asked to keep the contents of most of the games a surprise. Suffice it to say that what we've played so far is encouraging stuff, an eclectic mix of genres and ideas – some using the crank, some forgoing it – of varying length and complexity, and spanning many art styles. They feel intimate and personal, more than anything: thanks to the 1bit screen and accessible scripting language Lua, devs who might not usually handle certain aspects of development such as art or programming themselves have jumped in with both feet.

Tantalising, we know. But that's kind of the point. As someone who's had a lifelong love of videogames – ever since he pulled the blanket off an Atari 2600 hidden in the back of his parents' station wagon as a young child – everything that Playdate is "comes back to people who love videogames," Sasser says. "These are people who love games, and we love videogames. And creating videogames is such an awesome and powerful thing. So for us to even just be witnesses to the stuff that was happening was very cool."

So much that's joyous about games is about secrets, about surprises – something that's increasingly difficult to achieve in this day and age. (Indeed, Panic and its selection of devs have struggled with it: when you're used to the validation that comes from posting updates online, going without it can be tough. *Threes* developer Asher Vollmer decided to release his Playdate game, *Royals*, rather than wait for the handheld's release; Takahashi, meanwhile, hasn't been able to resist teasing animations from *Crankin* at his art shows – separated from the context of the console, of course, but still wracking plenty of nerves at Panic.)

"That's part of the reason why we wanted to keep this a secret," Sasser says. "Just because *nothing* is a secret in 2019. When I was a kid, there were barely videogame magazines. There certainly wasn't YouTube. And there was no way to know what a game was going to be, except to pick it up off the shelf and ▶



Zach Gage

What made you interested in Playdate?

The idea that somebody who was really, really talented was going to make something very cool that would allow indies to make interesting little games, and deploy them to a mobile device that wasn't the iPhone, was just really compelling. Especially the very microconsole requirements – the black-and-white screen and fixed resolution is really nice. Going from working on the iPhone, where you have to support three or four different aspect ratios, there's so much less to worry about.

How did you come up with your particular game?

I wanted to approach it as like, what's something that might ship with a new piece of hardware as a default experience? And how can I have fun with that? What has that experience been like in the past? And is there a way to lend some slight modern game design to something like that?

What makes a good 'default' game?

It has to be something that you can always go back to, after you've had whatever experiences that you've had in other games. And it has to be very simple, because it can't be something you'd forget how to play, because you need to be able to return to it constantly. It's kind of like when you read a book, you want the font to be something that is just perfectly legible, that you never even have to think about. It just needs to feel like it's always been there.

Will Playdate be successful?

You want to be in a space where you're doing something so strange and different that either you're worried that you're an idiot, or maybe you're actually doing something amazing. You don't want people to look at your thing and be able to add up all of the bullet points and go, "Yes, this should be successful". I think that's kind of what this is. It's a beautifully crafted, handheld device that has a set of weird constraints and a crank on it and a screen that's not backlit – like, I don't know if that should be successful [laughs] but it's totally unique.

flip it over and look at two screenshots." He's keen to stress that Playdate isn't about nostalgia. "But there was definitely something in that anticipation of driving home, and looking at this box over and over again, and dropping the cartridge in. And sometimes the games were just incredibly bad. But sometimes they were even better than you could have imagined. And so there's definitely an attempt to recapture a little bit of that magic that some generations maybe haven't even experienced." Secrecy, then, was key. They didn't want to run a Kickstarter, or test the waters with a concept post on Panic's blog. "We wanted this thing to come out of nowhere, fully formed, and just blow everybody's minds," he says.

'Everybody' is, perhaps, something of an overstatement. The new blockbuster console this is not: it's a goofy, pseudo-retro handheld curiosity. The final product is of the expected level of Teenage Engineering quality, but this also means units have been expensive to make; a Playdate complete with USB-C cable and that first season of games will set you back roughly £115, and Panic is not making a large profit above the unit cost. And unless you're a die-hard fan of the indie-game scene, plenty of its star devs may not even register your interest. Mercifully, Panic and its collaborators are under no illusions about Playdate's niche appeal. Indeed, when we ask the devs we speak to who Playdate is for, a couple half-jokingly tell us that it's probably for Panic themselves.

They're not far off the mark. "Even with our FTP client [Transmit]," Frank says, "we've always sort of been our own first customers. Like, 'What would we like to see in this? What would we use? And what would be delightful to us?' That's sort of our guiding light for everything we do. It's confusing to a lot of people, because they're hung up on, 'Well, how are you going to make money?' I don't know – and honestly, I'm not entirely sure how we've done it for the last 20 years." He laughs. "But somehow it seems to keep working out."

Panic has always been steadfastly independent – "like, maybe to a fault", Sasser laughs. Playdate, it seems, is partly a statement of intent. Not so very long ago, Sasser woke up to a Facebook message from Mark Zuckerberg expressing interest in buying Panic. "This is going to sound so bad," he giggles, "but I didn't reply. Like, this is not what I want. What? No, thank you. There could be a time when we reach the end of our road, and we run out of ideas and money. But we have avoided that like, aggressively. And any time I see a company in the software world pop up and make something, that's super-inspiring to me. Then they're immediately acquired by someone else and you never hear from them again. That voice is gone. And it kills me."

With Playdate, then, Panic has taken the opportunity to use its resources to make something emblematic of its values. "There's definitely a thing where businesses today, especially in Silicon Valley, are just these little factories that exist to make a single thing, and they don't even really care about that thing," he continues. "They just need to kick money back to the people that gave them money in the first place. And therefore it's a success. So all of the people that work for those companies are checked out. How much can you care when nobody above you cares?"

Like Nintendo making a copy machine in 1971, Panic making Playdate might not be a particularly logical endeavour. It exists to cheerfully disrupt, in a way – perhaps just make the suggestion of a disruption. "And maybe *that's* why we're put on this planet: to be an example of like, you can move slowly. Make sure you have enough money in the bank, make something good and see what happens. You don't have to go for world domination and crush your enemies like, 'We're going to be the number one fuckin' juice maker' or whatever." He laughs. "The point is, this is something I believe very strongly in and it kills me to see voices disappear. I get so inspired when people do crazy things like this. It makes me want to try crazier things, and I feel like that feeling is fleeting and hard to find. And I do wish it existed more. So we'll just do it ourselves."

So here it is: this odd little WiFi-compatible, 1-bit game machine with a crank. It's designed to make you wait and wonder. It's made to pull you away from whatever you're doing on your phone for five minutes of fun, and purpose-built ▶



Chuck Jordan

How did you get involved?

I had just left Telltale, and my friend Jake Rodkin is friends with the Panic devs, and they were working with him on *Firewatch* at the time. And I was complaining to him about looking for work, and was kind of disillusioned with games in general. And he said, 'Cabel and the guys at Panic are working on this weird thing that has a crank, and they've been looking for developers for it.' And so he introduced me at one of the *Firewatch* launch parties.

I've loved Panic stuff forever, so it was sparking that interest again. That aesthetic of the black-and-white display really took me back to the feeling of being in college and working with my Mac Plus, playing around with HyperCard and making adventure games for that.

Does your game use the crank?

It uses the buttons and D-pad, and the crank comes out for special features. But then I've seen other games that are designed completely around it. One of the smart things that they did was say, 'It's up to you, make the game that you want to make.'

When you're at a game studio, the platform developers are like, 'We have this feature, you have to use it.' I've seen that from the original Xbox, to the 360, to the Wii. I think it feels a lot more organic if you say 'It's neat that we have it, and use it if it makes sense to use it here.'

Who is Playdate for?

It kind of feels like it's aimed at Cabel, and Neven and Greg and the other guys at Panic [laughs], which sounds like it's a niche thing. But the more I think about it, the more I think that's the way to go. Having worked at companies that were obsessed with, 'What is going to sell? What is going to be marketable? What licences can we get?' That philosophy just kind of takes over, and you stop thinking, 'What's a fun experience?' If you care enough about it that you're not making it to sell, then it's going to connect, because people are going to detect what's real behind it.

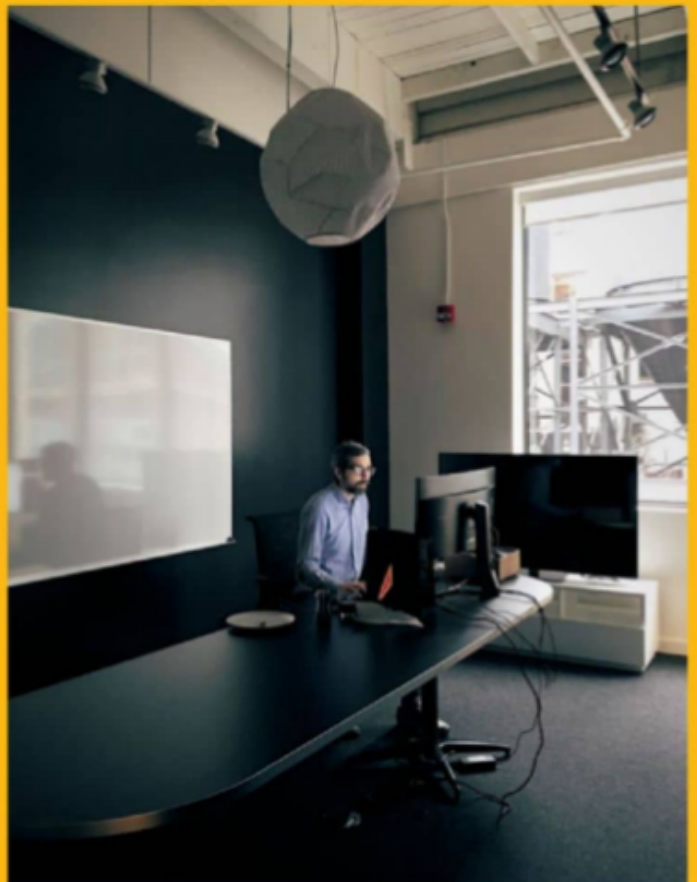
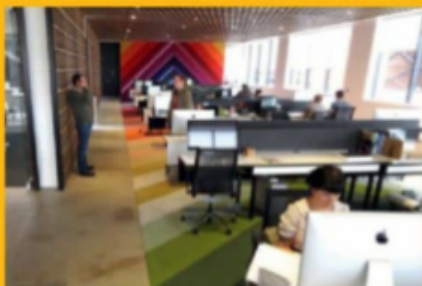


The offset screen was another TE idea, designed to balance out the asymmetry of the crank. It took a lot of work to get the screen so close to the edge of the device

"I would love for this thing to explode in sort of a mini-cultural moment and find an audience that really resonates with it"



The team's love of the weird and wonderful made for some brilliant, but difficult-to-execute ideas. They considered tradeable RFID stickers that, when stuck on the device, downloaded a game. "Reality sort of crushed that idea," Mrgan says, "but maybe down the road. Conceptually, that's the subculture kind of appeal we were going for"



to prompt radically new types of games and ideas from whoever ends up making software for it – and when the SDK is released into the wild among the Bitsy and Pico-8 microconsole enthusiasts, you can bet that the exclusive developer pool will get a lot wider and weirder. (When that will be remains to be seen, but the current plan is to ship the console itself later this year: preorders have just gone live on Playdate's official site, with deliveries due early next.)

So what does success look like? "This is what I struggle with," Sasser says, "because this whole thing has been an adventure for us. And it's hard to talk about that part without sounding trite and clichéd." Yes, Panic has learned a lot, has grown as a company and people, and the journey was the friends that were made along the way – Sasser's being deliberately tongue-in-cheek. "I never imagined that we'd have gotten this far, so half my brain is like, we've already set up to accomplish what we want to accomplish."

On the other hand, of course, this is a business, and Panic does want to see Playdate succeed. "I would love for this thing to explode in sort of a mini-cultural moment and find an audience that really resonates with it. And I feel like there's a chance that that could happen. I can't guarantee it. But in my heart, I feel like it will find its place."

"So it's difficult for me to answer," he continues. "It's kind of cheap to say, 'Oh, we've already won'. So whatever happens, happens – the true answer is, I really think that there are people like us and like these game developers who are going to just have their minds blown by the existence of this device. And they'll be so excited to hold it in their hands and play games and make something for it, or just see what other people made. We can't be alone. How many people that is, is a fair question. But I'm really confident that those people exist, and that the thing that we've created is irresistible to them, and they want to be a part of it. If we could just find that group, then that's a success to me."

It's counterculture, perhaps, in a friendly yellow form. It is different for the sake of being different. "I don't think we're really sweating if this doesn't sell – nobody loses their house, and we wouldn't make that kind of bet," Mrgan says. "But we do think it will be cool." He points to Teenage Engineering's similar viewpoint. "They make a keyboard for how much? I can buy one at Target for \$40'. Like, it doesn't make sense on paper. But it doesn't have to. People fall in love with things. And there just have to be enough of those people who are happy and continue being happy. We're not Unicef, we're not saving lives out there. But to the extent that a piece of entertainment and technology, and maybe a little bit of art can make you happy, we're trying to do that."

From its inception as something to shake Sasser out of an existential crisis, to its function as a continual source of surprise, Playdate has always been aimed at a particular audience. "We're building this for people who love videogames," Sasser says. "People who will never forget burning the bush in *Zelda* and uncovering stairs to a dungeon, or people who remember laughing uproariously as they roll the ball of stuff in *Katamari*, or even people who got chills when they were riding their horse in *Red Dead Redemption* towards Mexico and that song started playing. People who play *Firewatch* one week or *Uncharted* the next – they don't care about the platform, and they don't care about the genre, or the number of 'A's, they just care about that indescribably electric feeling of experiencing something new that games give us. That's been with me my whole life as I played videogames. So Playdate, in a way, is a shrine to that feeling."

Getting back in touch with that sense of reckless curiosity has been a balm for him, personally. "Things were not great for me, and running this company now, I feel almost like a different person," Sasser says. "I feel like a huge part of that is finding again how important it is to me and for everyone here to just make things, and be proud and excited about it. And that's why we exist. I don't know, it's so weird for me to calibrate. Because that's actually kind of preposterous, when I stop and think about it." He pauses, and laughs. "The whole thing is kind of preposterous, when I stop and think about it. But it's just what we do." ■



Keita Takahashi

What interested you about Playdate?

The device sounded cool: small, a 1bit screen, crank input. And the season of games, that was interesting. Also, games these days are very complicated; on the other side, mobile games are too simple. So I just needed to make something in between.

How did you come up with Crankin'?

The crank input reminded me of an old film, like a movie scene moving forward and backward. So I wanted to make that into a game mechanic. Sometimes, game designers get help from a new input idea. I hope that Playdate 2 has a different input.

I was thinking: 'Why are games so similar?' This is maybe an extreme thought, but we still use the button – that's kind of sad, right? But the crank – crank! (He mimes cranking.) It sounds stupid. I'm so excited about it. I've been wanting to try more alternative ways to input into games. That makes the game more defined, I think. If we didn't have the button input, I don't think shooters would be popular.

What were the challenges?

The crank is an analogue input. So we took a long time to figure out how to sync it perfectly with Crankin's walk animation. But that was a very small thing.

Does it matter if it's successful?

Actually, I don't think so, no. You said counterculture, and I feel the same thing. I know they wanted to release the Playdate earlier, but the timing is kind of perfect now. A big company like Google show off a cloud service using their technology and money, but Panic is a very small company, and makes a small device with a 1bit screen – that's kind of like life. [laughs] I'm always on the less strong side. Even if they fail with Playdate, it's still worth it to try. I don't think they'll fail, though.



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LAYSTATION





AN AUDIENCE WITH...

**AMY
HENNIG**

The storied creative director and
writer on starting a new studio and
sticking to your guns

By JEN SIMPKINS

Storytelling in games is on the cusp of transformation: fittingly, so is **Amy Hennig**. The celebrated creative director and writer has become almost emblematic of the state of narrative design in games. Through her work on the *Legacy Of Kain* series at Crystal Dynamics, and the *Uncharted* franchise at Naughty Dog, she helped push the medium to blockbuster heights thanks to an instinct for innovation – and a confidence that, by her own admission, hasn't always been easy to maintain. She was set to continue with the singleplayer Star Wars game that she was working on at Visceral Games, before EA cancelled the project and closed the studio. Now, Hennig is looking to start up on her own, convinced that the future success of games as a whole lies in smaller experiences catering to a broader audience.

Firstly, congratulations on receiving the Lifetime Achievement award at the Game Developers Choice Awards. How was that?

It's just such a warm feeling to feel recognised by your peers. I mean, we're just all stuck in our heads and our own little worlds. We all have impostor syndrome. The people that don't, there's something sociopathic and wrong with them, probably [laughs]. You know, we never feel worthy of that kind of recognition. But you don't want that to look like a lack of gratitude. I'm incredibly humbled and grateful.

It was a very loving room in general. I like seeing so many indie games winning at the major Game Developers Choice Awards, it just shows you that we're changing and maturing. It almost felt weird that the awards were split between the Independent Games Festival and the Game Developers Choice awards, because some of the games were nominated in both areas. Does that tell us that the lines are actually blurring? You want to make sure that you're encouraging indies, but you also don't want a wall up: you want to be able to see games like *Return Of The Obra Dinn*, *Florence* or *Celeste* nominated in the big categories. Because it doesn't matter about graphical fidelity – just, how many people did it touch? It makes us constantly reexamine the words we use when we discuss our craft. Is scope and fidelity what's important? Or is it about the vision and the message?

It feels like games just keep getting bigger and bigger. Is that about to change?

I've been talking to a lot of people about this. And look – sometimes I'm careful about what I talk about in

interviews, and then apparently not even careful enough, because we're in an age where a nuanced multi-page interview can get turned into... you can get sort of trolled, you know, by people that are looking for clickbait headlines. Most folks don't read beyond them. All of a sudden, there's no such thing as truth any more. It makes you just not want to talk sometimes.

But that's the wrong response. It's important that we're candid, and we work these things out and discuss them, because we are undergoing so much change. And I think discussing all the challenges that we have with the industry is critical, so we don't feel like we're alone in what we're feeling.

So yes, the size of games. It's not like I want to give our customers less for their dollar. But it's fascinating that the price of games hasn't changed over the entire life of the industry. In the past, cartridges were expensive to manufacture. Thus, the \$60 price point. When we went to discs, the publishers were very happy because the \$60 price point was still there. Now the cost of goods wasn't as bad, but then games got bigger, right? Then we went to digital distribution – great, there's no cost of goods at all. But we just keep upping the ante.

Why is that, do you think?

I think a lot of that came out of a response to, 'if it's too short or too finite, it's a rental! It's the Gamestop equation. That made us go, 'Well, it's all about customers getting a lot of hours of use out of the products that we're selling them' – even if it's the illusion of value, sadly. People weren't buying *Uncharted* for the multiplayer. But perhaps you could incentivise them to hold onto the game because they *may* want to play the multiplayer. Or looking at the back of the box, at all the features it has. 'This is value for my dollar.' But the amount of work that goes into the bullet points on the back of the box...

Everything is twice as big now. I think my first game was me and a programmer. And then we were up to 12, then 30 – this crazy, exponential rise. Now you've got hundreds of people and all your outsourcing partners over four or five years, and the price point hasn't changed. I hoped that digital distribution would unlock all of that. It would not only sort of democratise our medium somewhat – because it's harder to get a game in a box in a store than it is to be able to just drop something on a service to be downloaded – it would also allow us to have games of all sizes and price points as well as genres. And that just hasn't happened. ▶



Hennig worked as an artist on *Desert Strike: Return To The Gulf*



CV

Amy Hennig studied English literature at Berkeley, which involved two-and-a-half years of Ancient Greek – “because that’s useful”. Despite her misgivings, her lack of business acumen didn’t prevent her from being hired to work as an artist on Atari game *ElectroCop*, then moving up to lead designer on Electronic Arts’ *Michael Jordan: Chaos In The Windy City*. Crystal Dynamics was her next home, where she was a long-time director, producer and writer on the *Legacy Of Kain* series, before Naughty Dog hired her as creative director for *Jak And Daxter* and then her most well-known work, the *Uncharted* series. A spell at Visceral Games followed when she was hired to work on a (later cancelled) *Star Wars* project, although she spent most of her time helping get *Battlefield Hardline* out the door.

The serious sort of ‘gamer’ audience is big, but finite. And we’re making bigger and more challenging games for them – even anecdotally, longtime gamers, like me and my friends, think it’s more exhausting than it used to be. Twenty hours, 40 hours, 100... I don’t have that kind of time. Most people don’t. And the problem is as a storyteller, the ability to tell a well-paced story in that amount of time when there’s this filler in between is really difficult.

When – usually – an indie developer comes up with something that has an impact, is affecting and has word of mouth, we play it. But discoverability is a problem. I think there’s a certain element of gaming being our little secret club house that we don’t necessarily want to share. There’s a lot of existential threat: ‘If we make our hobby mainstream, it’s going to dilute it.’ My hope is that we just are more inclusive. It doesn’t alter the hobby we already have. It just adds to it.

Bandersnatch caught a bit of flak within the industry because it didn’t do anything particularly new for game fans. But it wasn’t for them really, was it?

And that’s a hard conversation to have. It doesn’t *all* have to be for us as gamers. I believe everyone wants interactivity. But we’ve ignored this massive audience because discoverability and intimidation are barriers for them. If you don’t consider yourself a gamer, you’re not going to buy a console. It’s expensive. We haven’t done a good job of making that accessible to people, but now it doesn’t matter because of streaming. So when it comes to these streaming services that are going to allow for realtime content – which is going to be a revelation to this audience – how do we help them find it?

The other problem is the controller. It’s an amazing device, but it’s incredibly off-putting to a mainstream audience. But we all have these devices in our pockets. We should be using them for this audience.

And then there’s content. Games, by definition, are about *beating*. We don’t beat books, movies or TV shows. It’s about failure, and resetting, and it’s about mastery, difficulty and competition. We need a new language. We need to take what we know how to do and reframe it; for this audience, we maybe need to eliminate fail states, and the punitive aspects.

This feels like a pivotal moment for storytelling in games. But things have been changing for a while, haven’t they? On a certain level, at least.

It’s monumentally pivotal, yeah, and I think we’re all having an existential crisis. I actually feel a little bit fortunate, because the problem we were trying to crack at Naughty Dog, and then on my *Star Wars* project, was kind of the same one. We were still making a game, in the classic sense – but how do you how do you take something familiar, a narrative form that we’re

familiar with, and then deconstruct it? And then how do you put it back together again as an interactive experience? What are the verbs, the tropes, the structural landmarks and the anchor points? And that’s why I think we saw the phenomenon we did with *Uncharted* and *Until Dawn*, where people’s loved ones were just as invested in the games they were playing. It didn’t feel, or look, or sound like a game – until it did, and then they left the room.

But we’re not going to convert this mainstream audience. We have to meet them where they are. And that opens up genre, format and style in exciting ways. As expansive as the game industry is, when you look at the big games, it feels like we’re getting more and more limited. Especially when everybody’s chasing games as service, and what that does to story. It’s very limiting, on a creative level. We have so much capacity to do all this stuff on the screen that we’re forgetting to compose the shot. In good ways and bad, we’re putting too much filler between these key story points – and we’re also just overwhelming players, and not letting them focus on things.

I know non-gamers who would absolutely love games like *Firewatch* and *Edith Finch*. But there’s no way for people to find them. They’re behind the barrier of a machine and a controller. The first thing I’d love to see is for some of these things to be brought through in a streaming service with a simpler controller, because those things don’t have fail states. They’re about experiential design. This was the beautiful thing about *Bandersnatch*, whether we debate how effective it was as an interactive experience or not.

What I don’t understand, because I’m a dopey right-brain creative, is how our business models change if we’re not packaging games in a box, or even as a \$60 digital download. How does it work on a subscription service? How do we make our money? There are perils there. But from a creative standpoint, I’m incredibly excited about what it will allow.

Last we heard, you were looking into starting your own studio. How’s that going?

So, I have an office [laughs]. I have me. I mean, look – it’s not like I’ve just been pontificating and scratching my chin for a year-and-a-half. I’ve been taking consulting gigs, things that I think will be interesting that let me work alongside interesting people and explore a new medium. So I feel like I’m keeping my mental plates spinning, but also making connections and sort of doing a little survey of the industry, connecting dots.

I’m having tons of meetings. Exploring this space means you need to talk to platform holders: Google, Netflix, Amazon, whatever, potential development partners. I mean, everybody now has an interactive division – I won’t name names just because that would

"WE'RE NOT GOING TO CONVERT THIS MAINSTREAM AUDIENCE. WE HAVE TO MEET THEM WHERE THEY ARE"

spark headlines – but every single film or TV production company has an interactive division. Some are more invested in others, or farther along. But they're all trying to figure out how they become part of an interactive future as well. So you think, well, with their distribution marketing channels, their brands and maybe even their IP, that could be a good partnership.

Starting your own studio will be a new challenge and a big responsibility. Will this be the first time you'll properly be putting your business hat on?

Yes, and I don't like the business hat. I like the creative hat, I miss the creative hat. It's stretching different muscles, which is fun, but believe me, I am antsy. I'm hungry for getting back to that day-to-day grind of creativity, but the reason I don't mind all the business talk is because it's so speculative. It's fascinating, right? I'm seeing how things are evolving.

When I originally talked to people, it seemed like the blue ocean was VR and AR – and I think it still is in lots of ways, but solving narrative in that medium is a little ways off. It's like at the beginning of film, where you can be a pioneer, which is why I was attracted to games in the first place. And I would be totally happy there. But I'm fascinated by this other thing that's evolved since I've had those conversations, which is realtime streaming, which is going to change everything, I think. I would love to be one of the people at the forefront of creating content for this new world, where we're going to reach people that have never played games. They just don't know what we can do. And so that's an exciting place to be, to feel like we're going to get to surprise and delight people with marvellous stuff.

It seems like you've always had that pioneering spirit, ever since you helped pitch Nathan Drake, a dude in jeans, as a hero in an era where mascot characters were everything. Where do you find the confidence to push for innovation?

It's all an act. There's nobody who's 100 per cent confident. All we have is our best guess; the question is, what does your gut tell you? As long as you're really



One of Hennig's two Writers Guild Of America Videogame Writing awards was for her work on *Uncharted 3: Drake's Deception*

honest with yourself, as long as you've done your work, and you've thought through why you want to do a thing and why it's reasonable, then your guess is as good as anybody else's. There's a little bit of a zen space you get into, where you realise that we all have impostor syndrome. We always believe that everybody else is much more competent, and much more knowledgeable than we are, and that's just not true.

Honestly, if the rest of the diverse people around me said, 'This is fucking crazy. Why do you keep pushing on this idea?' then of course, I'd reconsider it. But at Naughty Dog the most experienced people were constantly gut-checking each other, and we had that brain trust going.

So it's really all about the people you surround yourself with?

Ideally. It's hard when you're going solo, because there's a lot more opportunity to second-guess yourself.

Are you going solo now, or are you already assembling the brain trust?

The latter. In Hollywood, where everybody is a free agent, you see a lot more of that – kind of like ad hoc writers' rooms. Just to sanity-check things against each other, otherwise you get [stuck] in your own head.

You've said that making games at Naughty Dog could be chaotic at times – everything was a mess, right up until it wasn't. Will that always be your preferred creative process?

That's not my process – it's game development. What we do is fundamentally a sustained act of faith. We're walking a tightrope across a void without a net [laughs] with a blindfold on. Like, it's insane what we do. It doesn't fit on a spreadsheet. The problem is, how do you take faith and quantify that in a way that businesspeople or producers are comfortable with?

Our job is to be really uncomfortable, and get comfortable with being uncomfortable all the time. So for those of us that have made enough games now, it always looks like a disaster until it doesn't. And all of a sudden, the pieces coalesce. And you go, 'Holy shit, it worked'. ▶



Hennig both wrote and directed *Legacy Of Kain: Defiance*, the fifth instalment in the *Legacy Of Kain* series



Visceral's Star Wars game – codenamed *Ragtag* – was cancelled in 2016. The studio was closed shortly after

Working at Visceral on the Star Wars project must have been a very different experience. What did you learn from your time there?

Okay, I'm going to tell you something shameful. Before I went to EA, I didn't know what P&L stood for. Oh, that's so embarrassing. I mean, I was a 50-year-old adult woman. At Naughty Dog, we were there to just make the thing, and not worry about the business side. But coming to EA, because it's much more driven by quarterly results, and that's much more explicit to the developers, I had to talk about a lot of different things I had never known about before. So I felt like not only had I been spoiled, but I'd also been sort of stunted.

I regret not being savvier. It's not that I felt like that led to me making any sort of naive decisions around my work at EA; it's just I don't want to be the idiot in the room with a blank look on their face when somebody says P&L. So for what it's worth, I'm trying to catch up in my old age [laughs]. I wish I'd taken business classes in college!

I joined Visceral in April of 2014. And then I had a very small core of about five people, because the visual team was working on *Battlefield Hardline*. By July, I started getting pulled onto *Hardline* to try to help it get done.

How did you feel about that?

I'll be candid: it's a very awkward position to be put in, and I wish my management had not put me in that position. Because once they say, 'Would you help?,' and you're the new kid on the block, you have to say yes. The team is struggling and they need help. And there's a version of that where I could have gone, 'I'm going to stand my ground' – but I would have looked like the biggest asshole prima donna. And look, I don't have a team if we don't get *Hardline* done, right? And people are struggling, and these are also going to

be my teammates. So this is an opportunity to form relationships with them.

But it also delayed things. And when Naughty Dog made *The Last Of Us*, I think that team was 160 people. So I'm like, 'We're going to need something similar, plus outsourcing, plus external partners.' But Visceral was actually EA's most expensive studio because of its location: it was three times as expensive as a studio in, say, Montreal, because the Bay Area is ridiculous. So that was a constant source of stress, having to defend the existence of a studio that I was hired to work at. And I understand the business realities of it, but it sure made it hard.

We had to have under 100 people – more like 80. We went through some reboots and layoffs and tried to restructure the studio, to shape it around what we needed to make and what was financially feasible. But even after we finished *Hardline* at the end of 2014, there was a year of DLC to do. So it wasn't until the spring of 2016 that we actually got the rest of the team back [for Star Wars].

In the meantime, we're trying to build up Motive to build the foundation for Jade [Raymond]'s studio, and it makes sense for them to be our partners – there's the other 80 people. They're in a cheaper location, they're coming up to speed on Frostbite. Perfect, right? That was the whole plan. And then by the end of that year, it was clear that they were needed on *Battlefront*. And so that entire studio that we'd been helping to like, interview and build up, went overnight. And then it took another year while we were going with our half a team – and less than that because we actually donated people to work on *FIFA*. I'm not trying to tell tales; it's more like, these are the challenges of game development. There are so many financial and organisational realities that we have to navigate.

It's part of your job to take one for the team occasionally. But it's painful, right?

Totally. We want to share our work with the world. It's so hard, and there's a sense of unfulfilled promise. But you have to take the long view of your own life. People say, 'Would you have made a different decision knowing what you know now?' And I have to say no. But the experiences I had, the people I got to work with... Like, even if I could erase that pain I wouldn't. You have to make peace — and maybe this comes with age as well — because you rack up a number of setbacks and tragedies in your life where you're like, 'Life is pain, and it's glorious too, and I value what I gained.'

What kind of person do you have to be to be successful at this level?

You have to be willing to jump out of a plane without a chute. 'We'll figure it out on the way down.' If you want certainty, I don't think it's the business for you. You also have to be wanting to learn all the time: the stuff you know right now might be useless a year from now.

I like that, because I want to be in 'school' for the rest of my life. It's a creative industry where things change so much, so rapidly, that you have to be constantly on top of things.

And to be able to sustain faith in yourself. You have to exhibit that confidence and go, 'Okay, this is what we're going to do.' And you have to be open to saying, 'You're right, I'm wrong about that. We should go with your idea.' The hard part about the job is trying to walk that razor-thin balance beam between humility and ego all the time.

And then, you know, you go back to your desk — you go, 'I don't fuckin' know if I trust myself. I don't know what I'm talking about. I'm just a schmuck. I don't belong here. How did I get this job?' Like, we all feel that way. So the more we talk about that, the more I think it's good for people that are coming up, and people in indie spaces, and people that are young in the industry to go, 'Oh, that's normal. Even the people that I'm holding up on a pedestal feel that way, even now.' We worry that we have to project strength and certainty all the time. But it's okay to say, 'I actually don't know, let's talk about it.'

I think that reassures people that there's no magic act to being a director. It's about doing your best to find the answers. And to work with people that you trust to find the answers themselves.

You've managed big teams before, but setting up independently is a different challenge altogether — there's the added pressure of responsibility. When you're talking to people now, do you have a solid enough idea that you feel good pitching to them?

Yeah, sure. But I'm just doing this without pay — I mean, I sold a bunch of EA stock, I'm okay for a while [laughs]. I have the luxury of being able to go, 'I'm going to take

"IT'S A CREATIVE INDUSTRY WHERE THINGS CHANGE SO MUCH, THAT YOU HAVE TO BE CONSTANTLY ON TOP OF THINGS"

a year and just sort of coast a little bit, take the gigs I want to take.'

But I want to do this properly. So is it weird to be in a situation that's different than being an employee of a large company? Yeah, absolutely. I want to get to a position where I have some long-term partners that will secure our ability to do some groundbreaking stuff in a creative space, and that ensures I have enough runway for the people that I want to bring on board so they're not taking a financial risk with their families.

Uncharted 4 was a lot of your work, but your last full game release was in 2011. Your next game must be feeling particularly important to you.

Like, sure [laughs]. At 54, you start doing the math. It sounds so morbid, but you do get to a point in your life where you go, 'Oh, I've got way more road behind me than I have ahead.'

How does that change your mindset?

You start to get really philosophical about it. You no longer have the illusion of infinite time. There's a sense of being present, and valuing what you have right now, whether that's in your work, or your family, or whatever. You're more grateful for the things you have right now, as opposed to constantly looking behind you, or constantly looking ahead. And I think that makes you a better partner.

So what does this say about my next thing? Well, look, I don't want to be on a five-year project. Part of my enthusiasm about this idea of streaming going mainstream is that I don't think we have to go dark for five years. I think we can get smaller bites out there and have more of a dialogue with our audience about what works and what doesn't. There's not the expectation of making some \$100 million magnum opus; you can make an hour-long experience that is incredibly effective, and emotional. And for this audience — that isn't necessarily looking for a hobby, they're looking for an experience — that's fine. I would much rather be aiming our lens that direction than trying to figure out how to be the next massive game-as-a-service. ■



Jak 3 was the first game Hennig worked on at Naughty Dog — Uncharted came later

New wave

Before we've even reached the festival floor, A Maze's curious charms have begun to take hold of us. The ticketing lobby of the Berlin venue — usually a site of impatient attendees, frantic organisers and stoic-looking security men — is slowly filling up with shredded paper, and will continue to do so over the course of the week. It's all thanks to *The Book Ritual*, Alistair Aitcheson's self-described BYOS (bring your own shredder, obviously) which immediately asks us to pour our heart out into a copy of Thomas Hardy's *Jude The Obscure* with a felt-tip pen. "Have you ever lost a thing that was special to you?" the game asks us. "I want to know." Within seconds, we're scribbling down our deepest thoughts, safe in the knowledge they'll be shredded moments later. It's a refreshingly cathartic start to the festival, a coded message instructing us to leave our baggage at the door in expectation of a cornucopia of mind-bending videogames.

Our initial experience chimes with **Thorsten S Wiedemann's** proclamation, during his opening speech, that A Maze is a place of positive chaos. "It's not about

How A Maze Berlin is reshaping
videogame conventions
and ushering in a new era
of avant-garde play

By **LEWIS GORDON**

products," the festival's founder and director booms from in front of the DJ decks, "but the art of play." It's hard not to be swept away by both Wiedemann's message and his delivery. On stage, he exudes a skittery, almost manic presence, skipping back and forth between prepared material and off-the-cuff jokes, his persona mirrored neatly by his appearance. Wiedemann is a part-time model: tall, rough and ready, with blonde stubble. But he's also gangly, seemingly off-balance at times, with a beaming grin that breaks out every minute or so. He continues with his wide-ranging inaugural speech, the biggest cheer from the crowd reserved for his description of the attendees as the "punks" of videogames. The message is held together by his earnest, total commitment to what he views as the experimental and avant-garde — not only in games, but in pure play and its intersection with emerging technology.

This year marks the seventh annual A Maze Berlin, its first iteration having taken place in 2012. The seeds of it, though, were ►



The design of the festival is purposely transformational, constructed to open up new ways of thinking about games

sown far away in China, where Wiedemann was travelling with Michael Liebe, then a colleague at the German magazine *Game Face*. "We were sitting super-drunk in Shanghai," he tells us, the broad smile emerging again. "And we were like, 'Oh, we hate this. This fucking industry is so boring. Something is missing.'" At the time, Wiedemann was interested in the kind of cutting-edge media art exhibited at renowned international festivals such as Austria's *Ars Electronica* and Germany's own *Transmediale*. His idea was to fold videogames into this experimental sphere, but positioned as something unique, hoping to find common ground between the interactive art popular at the time and the newly emerging indie games of the era: small, personal projects such as Jonathan Blow's *Braid*.

Prior to 2012's first Berlin festival, A Maze took the form of ad hoc events across the city at various bars and clubs, the first of which took place in 2008. Only a handful of games were exhibited alongside DJ sets but it began to bring a small community of like-minded game-makers together. "There was nothing in Europe, Germany or Berlin that actually discussed the conversion of games and art," Wiedemann says. "It wasn't there. In the States there was IndieCade and Fantastic Arcade, but I was here." In 2009 a larger event took place at Kim Bar, solidifying what A Maze could become in Wiedemann's mind. Then, in 2010, he began writing a funding application, with the help of *Transmediale*, for a larger, more fleshed-out festival: essentially, A Maze Berlin in its current form.

The early years of the festival weren't without hiccups. Wiedemann speaks both candidly and regretfully about how Ed Key and David Kanaga, the makers of its very first

award winner, *Proteus*, weren't able to collect their prize money until the following year because of Wiedemann's budget mismanagement. "It was kind of horrible," he says. "I had to say sorry." In 2013, A Maze Berlin moved from its first home, HTC, to Urban Spree. This presented another set of challenges in terms of the layout and how to organise the twin focuses of the festival: its wide-ranging talks and the exhibition itself. "We had the conference in the same room as the game selections," Wiedemann explains. "So we also got lots of crazy feedback, people saying, 'You can't do this and you can't do that.' We did a lot wrong but I think people liked it because it was simple, sympathetic and authentic." In spite of these bumps along the way, the move to Urban Spree also helped the team flesh out the vibe of the festival, developing what Wiedemann describes as a "Burning-Man-like feeling" with an array of outdoor bars, lounges and installations.

This year A Maze Berlin has moved again, this time to Sez, a labyrinthine, multipurpose recreation centre built in East Berlin while the area was still part of the Soviet bloc. From the outside, the building's slanting irregular exterior gives the impression of a spaceship, albeit coloured with fading purple and red paint. Once we make it through the lobby, the sensation that the festival itself, not to mention its guests, are aliens who have touched down from outer space grows stronger. The first thing we notice is the noise – the heavy synth-driven beats of co-op platformer, *Vectronom*, blasting as we sign into Moshe Linke's interactive guestbook. On the ground floor there are two tiers. The higher of the two is filled with an array of strange, performative VR experiences. *HanaHana: Full Bloom* catches our eye as we walk past, its action consisting of a VR player stimulating trippy plantlife with broad, gestural inputs. At another installation, *Virtual Materialism*, we spot a young boy grinning at a virtual recreation of himself made out of everyday objects, powered by Kinect-like technology.

Wiedemann tells us the design of the festival is purposely transformational, constructed to open up new ways of thinking. The lower tier of the ground floor is bathed in



ABOVE With the action mimicking guests' own body and gestures, *Virtual Materialism* brings players of all ages together curious to see what they might look like if constructed out of commonplace objects



TALKING SHOP

In a welcome break from most other videogame events, A Maze Berlin is noticeably lacking in business chatter. Wheeling and dealing is consigned to the A Maze Village, a conspicuously small area of the festival inhabited by organisations such as Devolver Digital and Unity. In a nod to Wiedemann's broad vision of playful media, *Opera Beyond*, a Finnish organisation focused on the incorporation of technology into performing arts, is also present. Wiedemann tells us he's both content with the size of the Village and conscious of its impact on the overall vibe, happy for the A Maze Berlin's guests to trade ideas rather than capital.

ABOVE One of the more conventional games exhibiting at A Maze Berlin, *Mundaun* melds exploration and adventure with a gorgeous handpencilled look, digging into the eeriness of Alpine folklore



BELOW A darker, even more foreboding twist on the *Dark Souls* formula, *0_abyssalSomewhere*'s decaying, monochromatic aesthetic manages to turn heads on a busy festival floor



pink light, the sound of videogames and chattering players bouncing off the cavernous exposed concrete ceilings. This is where we find the bulk of A Maze's exhibited games, ranging from the slow, deliberate pacing and desaturated colour palettes of *Mundaun*, *Horses* and *0_abyssalSomewhere* to the chintzy internet nostalgia of *Macdows 95*, *A_DESKTOP_LOVE_STORY* and *Wrong Box*. That the games are displayed on the type of fencing you'll see at an actual music festival serves to underline one key point: this is the most Berlin videogame event we've ever been to. When we run into **Robert Yang**, professor at New York University and creator of games about gay sex and intimacy, he puts it more succinctly than anyone else: "A Maze is one of the few times where videogames feel cool to me, and actually part of a cultural zeitgeist in conversation with all these other mediums and artforms."

Upstairs, amid more exposed concrete and trailing wires, there's a lounge, meeting area, workshop space and the two talk stages. Oh, and there's another entire exhibition, *Devolution*, where guests can play through early builds from the development of independent hits such as *Ape Out*, *Hidden Folks* and *Kingdom*. We spend the bulk of our time on the upper floor watching the speakers curated by Wiedemann and **Lorenzo Pilia**, the festival's program manager. Highlights include Tyu Orphinae's insightful observations on dress-up games and Jenny Jiao Hsia's approach to her deeply personal work. Each is emblematic of the freewheeling, adventurous spirit driving many of the talks forward, the result of a commitment to core values at the heart of A Maze's programming.

"Diversity is the top priority, you know," Pilia says. "A few years ago, it was mostly about gender, but having done this for longer, it's not only about gender and gender identity, it's also about race, geography and age. It's not easy, it's not difficult, but it needs to be one of your priorities." Crucially, the paradigm-busting talks and games that are A Maze's bread and butter tend to emerge from underrepresented viewpoints. It's perhaps unsurprising, then, that ▶

RIGHT Accessibility meets serious real-world issues in *Fantastic Fetus'* breezy depiction of pregnancy, albeit with a dark sense of humour and a narrative sting in its tail. BELOW *Static* might boast a beguiling, *Proteus*-esque look but its audio puzzles, inspired by Haruki Murakami, mark it out as a unique experience



RIGHT *Consume Me* is a charming highlight of the festival, making use of iOS touch controls across an array of increasingly bonkers minigames, all centred around creator Jenny Jiao Hsia's relationship with food



ABOVE *Kassinn*, a multiplayer VR game, scoops the festival's top prize, chosen by a jury comprised of Anita Sarkeesian, Nina Kiel, Adriaan de Jongh, Peter Lee and Vit Sisler



mainstream, big-budget end of videogames is only mentioned in passing, if at all. And what deeper discussions do take place are fiercely critical of the values inherently bound up in the commercialised wing of videogames. Jessica Palmer, member of the Berlin-based experimental videogame collective AAA, delivers a funny, brutal takedown of *The Sims*, deftly showing how the game doesn't allow players to imagine life outside of its "capitalist fantasy." Sabine Harrer, meanwhile, explores the myriad ways in which videogames perpetuate colonial perspectives, quipping, "It's called *Minecraft* for a reason, not *Yourcraft*."

The talks themselves don't feel like a mere afterthought either. If A Maze's game lineup can sometimes feel dense and even impenetrable — take Alexander Muscat's disorientating geometric explorer *World4* or Elijah Cauley and Amit Rai Sharma's beautiful and surreal walking simulator *Static* — then the talks provide context. Often coming from the creators themselves, they offer a window into the humans behind such games and the sometimes knotty, difficult circumstances in which they work.

Fantastic Fetus is one such example, a Polish *Tamagotchi*-esque game from developer Fantastic Humans in which players must keep an expectant mother alive for the duration of her pregnancy. Created in reaction to a controversial 2016 Polish anti-abortion bill, its lead developer, **Aleksandra Jarosz**, delivered a talk with Argentinian artist Florencia Rumpel Rodriguez, on how games might function as protest. And for Jarosz herself, A Maze Berlin was a supportive, considerate space in which to exhibit *Fantastic Fetus*. "The audience at A Maze is perfect for our game," she tells us. "They are really open-minded and I don't need to explain to anybody why the topic is important."

Fantastic Fetus cuts to the core of Wiedemann's selection criteria for A Maze. "I'm looking for games which are visionary and move into the avant-garde," he says, while also emphasising the need for accomplished execution. "It should be radical, subversive, and socially critical. It can be a fictional story but it has to somehow be connected with the reality."

HYPERLOCAL MULTIPLAYER

From *Sticky Cats*' bonkers physics-based competition to *Anyball*'s procedurally generated sports, local multiplayer titles are crowd-pleasing favourites at the festival. The most intriguing swaps competitive play for cooperative, gracefully fusing an array of media in the process. *BE B:E:R:N:D* depicts a future where rising sea levels are flooding Berlin, and asks four players to work together in a bid for survival. Merging AR, VR, a retro text adventure and audio discovery, all situated around a tabletop map of the submerging city, *BE B:E:R:N:D* offers a tantalising glimpse into not only our climatic future but that of local play.

If A Maze's game lineup can sometimes feel dense and even impenetrable [...] then the developer talks provide context

I'm not a space boy. I want to see realistic, naturalistic things in videogames."

It's not difficult to find such values reflected in the winners of the annual A Maze Awards. Scooping the Explorer Award, *Operation Jane Walk* repurposes *The Division*'s post-apocalyptic environments to create a non-violent tour of the city — a video, yes, but one with surprising historical depth. Jenny Jiao Hsia and AP Thomson, meanwhile, take home the Digital Monument Award for their depiction of societal expectations and dieting in *Consume Me*.

Robert Yang views A Maze and its championing of such titles as a broader process of folding games back into the realm of art, away from the megabudgets of traditionally dominant major studios. "Videogames didn't really start with an arts culture; they started with a product-based, entertainment-industry culture," he tells us. "And it's only fairly recently in the history of videogames that there have been more artistic communities trying to come out of that. So it's like we're reverse-engineering art from the capitalism that formed videogames. Festivals like this are us trying to figure out how to do that."

Key to A Maze Berlin's identity is its international outlook. Russian duo Maria Fedotova and Danila Yakovlev, who develop as Lowpolis, scooped the Humble New Talent Award. It's not uncommon for non-English speakers to take to the festival stage alongside interpreters, in further reflection of Pilia's explicit diversity aims. A longstanding partnership with the Goethe-Institut, Germany's flagship cultural exchange program, has resulted in the hosting of Enter Africa, an initiative bringing ►

together developers from 15 different African countries. Such efforts complement A Maze's Johannesburg event, which ran from 2012 until 2017, part of a wider effort to "activate" scenes around the globe. Elsewhere, single events have been hosted in locations ranging from Palestine to Kiev. "It's the cultural differences that are interesting," says Wiedemann. "We try to make people aware that they exist, and they should come together."

It works both ways, too. **Troy Duguid**, another member of AAA, values the role A Maze Berlin plays in bringing internationally renowned videogame artists such as Tale Of Tales' Auriea Harvey to the city. "It just humanises everything," he says. Fellow AAA member **Jessica Palmer** explains that she finds the festival similarly galvanising for her own artistic practice. "I attended a workshop run by Anita Sarkeesian on inclusivity and game mechanics and I was able to have this discussion with other people, which is really exciting because I never get to do that in real life. I don't know anywhere else other than A Maze where I could meet 30 people who can talk about it in a really cool, respectful and inspiring way. It attracts like-minded people, which is refreshing."

Yet in spite of its outward-looking internationalism, A Maze Berlin does still feel distinctly of the city it calls home. Unsurprisingly, there's a strong local turnout both in terms of local developers and artists, but also punters. The relationship with music, too – from a workshop on live-coding generative music to a fleshed-out music program featuring the chiptune and gabba artist DJ Scotch Egg – might only happen in a city that has turned clubbing into a cultural export. The world-famous techno nightclub, Berghain, is only a short walk away, after all. And it's after hours, once all the talks have finished, when A Maze Berlin really clicks. The music begins at 10pm and runs through until 1am, and the exhibition itself stays open. The lights of the monitor screens flicker on the loosened faces of late-night players; interaction between them, onlookers and the games somehow more fluid. In this setting, the act of play feels more free.

A Maze Berlin isn't perfect by any means. Yes, the exhibition comes alive during the night, but the expo setup of single stations, occasional queueing and jostling crowds can feel noticeably awkward during daylight hours, particularly when the games are dealing with such weighty subjects. At times, we wonder if the more introspective titles of the lineup might benefit from a quieter, more reflective space. And despite the festival's laudable commitment to diversity and accommodation of overseas guests, the shortage of African, South American and Asian developers in both the exhibition and the awards nominations is noticeable. These are, of course, wider structural issues, and A Maze is attempting to remedy this with its broader international outreach and progressive programming, but there is still much work to be done.

Over its six-year history, A Maze Berlin has evolved in relation to the wider videogame industry itself. In 2012 and 2013, it was known as A Maze Indie Connect, reflecting the popularity of the independent scene at the time. Now the indie scene is bigger than ever, helped along by the democratisation of development tools and its star names showing that it is possible to make a sustainable living from small titles. As profits rose during the 2010s, a definable 'indie' aesthetic emerged, revealing a schism between commercial titles and the more experimental scene. It's a point Pilia is conscious of and keen to underline with the festival's programming and a subtle shift in focus. "Now we talk about playful media," he explains. "We're exploring the more art-

"We're exploring the more art-focussed experiences, detaching ourselves from the commercial indie scene"



BELOW Enter Africa, a cultural exchange program with the Goethe-Institut, is helping usher in the next wave of African videogame makers from an array of countries and backgrounds



MAIN *The Game: The Game* asks what a dating sim might look like in a bar full of obnoxious pickup artists. The result is a nightmarish loop where "no" is never enough



LEFT Music is hardwired into the DNA of A Maze Berlin. Wiedemann, a DJ himself, performs the festival's closing set, bringing a stellar week of face-melting sounds to an end

focused experiences, detaching ourselves from the commercial indie scene." Indeed, in the face of algorithmically driven storefronts emphasising the most popular titles, not to mention diminishing media opportunities, A Maze provides vital visibility for the games and developers it champions.

Wiedemann echoes his colleague's views. He's keen for A Maze to act as a hub for not only experimental videogames but other forms of media, citing the confluence of technology and play within other artistic disciplines. "You have people from theatre and film — visual art is coming in especially with VR and AR. And it's going to happen so fast, especially because the technology and interest is there. Older institutions are contacting me. They say, 'You have a community and we need developers.' There's a huge opportunity to create something that isn't strictly a game. It's a step beyond."

Having just won the Special Prize at the Deutscher Computerspielpreis (essentially the German equivalent of the BAFTAs), as well as securing significant funding to be distributed over the course of the next four years, A Maze Berlin's future looks exciting and, perhaps more importantly, secure. As is befitting such an outwardly and artistically ambitious event, Wiedemann looks to the world of cinema to drive home his vision. "In movies, you need to have an arthouse," he says. "Otherwise, there is no balance." It's Pilia, though, who best sums up A Maze's current form, describing it within Berlin's relatively recent videogame history. "Usually at the beginning [of a scene] there's nothing but then a small, local group of developers start something. There's a stage where a hero emerges, perhaps a developer who makes it. Now, there are some known studios, but I think before that even happened, the hero in Berlin was not a developer but A Maze. You go around and people ask, 'Where are you from?' and you say, 'I'm from Berlin,' and then they say, 'Ah, A Maze is from Berlin.' It's become a focal point." ■



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T H E M A K I N G O F . . .



T E T R I S E F F E C T

How Sunday drives, long baths and desert raves
saw a classic puzzle game reborn

BY NATHAN BROWN

Format PS4, PSVR
Developer Monstars, Resonair
Publisher Enhance Games
Origin Japan
Release 2018

The Eureka moment arrived, as Eureka moments must, in the bath. *Tetris Effect*'s first-time director **Takashi Ishihara** had known for a while that the project was in trouble. Games that bear **Tetsuya Mizuguchi**'s name are often narcotic experiences, but at this stage in development *Tetris Effect* caused some awkward side-effects: fatigue, difficulty concentrating and drowsiness. Ishihara himself woke up on more than one occasion from an unplanned nap, still wearing his VR headset. Even more worryingly, players were barely noticing the festival of sound and light kicking off around the field of play – the things that define a Mizuguchi game. After two years in preproduction, during which Ishihara had crafted a detailed VR design document for each of *Tetris Effects* 30 stages, showing how scenery and effects would build and swirl around the player in full 3D, he had accidentally made, well, *Tetris*.

This would not do. Ishihara's career had been building towards this point ever since high school, when he first played *Rez* and suddenly knew what he wanted to do when he graduated. He studied graphic design and played a lot of games, but hadn't planned a career in the game industry until he discovered, in Mizuguchi and his Sega division United Game Artists, a group of apparent kindred spirits. "They were even called United Game Artists," Ishihara tells us. "Here was this group of people on the cutting edge, treating games and art as equally important. UGA were the only ones doing that kind of thing at the time. I knew I wanted to work there."

The UGA website's recruitment page was blank (deliberately, Ishihara suggests, to raise mystique) and so he applied for a job at Sega, figuring that once he got his foot in the door at the parent company he'd find his way to UGA. Within weeks of him starting as an artist on Sonic Team, word came down that Mizuguchi was leaving Sega, and UGA was being wound down (and absorbed, ironically enough, into Sonic Team). Ishihara, though disappointed, got his head down and got on with it, until a few years later when a co-worker brought in a PSP and *Lumines*. The careers page for Mizuguchi's new studio, Q Entertainment, was also blank, but this time Ishihara wasn't about to be deterred. He wormed his way in, worked hard, and was finally tapped as art director on *Child Of Eden* – for which he produced over 3,000



Dolphin Surf finely communicates Ishihara's Sunday-drive design thanks to its relaxing sense of forward motion

pieces of art. He reprised the role for the making of *Rez Infinite*, but while Enhance's VR remake was still in preproduction, Mizuguchi took him to one side. He had an idea.

Mizuguchi had known Henk Rogers, the head of The Tetris Company, since the early 2000s. Inspired by Sony's announcement of PSP, which Ken Kutaragi pitched as "the Walkman of

"HERE WAS THIS GROUP OF PEOPLE ON THE CUTTING EDGE, TREATING GAMES AND ART AS EQUALLY IMPORTANT"

the 21st century", Mizuguchi had started thinking about how the unique audiovisual style he had pioneered in *Space Channel 5* and *Rez* might work in a game aimed at a massmarket audience. How about a puzzle game? How about *Tetris*? He and Q Entertainment CEO Shuji Utsumi met Rogers in Tokyo to discuss it, but EA held the licence. Still, the two kept in touch. Mizuguchi told Rogers about the US music festival, Burning Man, which he'd attended a few times in the late '90s. Rogers has been every year since. When Mizuguchi went back in 2011, the two hung out, and Rogers invited him to stay at his ranch, on Big Island in Hawaii.

"It wasn't for business, just for friendship," Mizuguchi tells us of his visit. "We were having a casual, creative conversation about the future of games, and the future of *Tetris*. He said he wanted to create a new type of *Tetris*, with sound and music – like *Lumines*, like *Rez*. I think his

motivation had been growing and growing all those years. He said, 'Hey, Gooch' – he calls me Gooch [laughs] – the *Tetris* licence is available on PC. If you want it, you can have it."

Mizuguchi wasn't sure that PC alone would be enough, but was sufficiently intrigued to take Ishihara to one side once he returned to Tokyo, and ask him to render up a few concepts. 'Gooch' paid his friend another visit, and showed him Ishihara's ideas. He sums up Rogers' reaction in a single word: "Wow". It had taken a decade, but Mizuguchi finally had *Tetris*.

Ishihara set to work, pretty much on his own, while the rest of the studio focused on *Rez Infinite*. That, too, was originally planned as a PC game, but it soon spread to console – the team were planning on funding it through Kickstarter, and realised that the more platforms the game was on, the greater its chance of reaching its funding target. "The reason for *Rez* being on PC," *Tetris Effect* producer **Mark MacDonald** tells us, "was so that it wouldn't be locked away on a bespoke platform ever again. People would be able to play *Rez* for the rest of time, or at least for as long as current PC architecture is around." Then Sony unveiled Project Morpheus, the working title for what would become PlayStation VR, and everything changed. Mizuguchi's original vision for *Rez*, after all, was as a fully 3D, VR-like experience. "It felt like kismet," MacDonald says. "And from the first time I heard about *Tetris*, Mizuguchi-san and Ishihara-san were already thinking of it as a VR project, too."

Ishihara's solo preproduction phase ran for two years, working up stage designs. Essentially, he was making the backgrounds, knowing that the foreground would be coming later. Once all 30 were completed, and *Rez Infinite* was done, full production would begin, with Ishihara as game director. "Of course I felt a lot of pressure," he says. "And I was kind of nervous because there would be less of a barrier between me and the audience; my ideas were going to more directly become a product that people were going to react to. There were some sleepless nights. Literally sleepless. But it had been a while since I'd really felt like I'd been able to flex my creative muscles, and I was ready for it. It was like, 'Okay, I've been waiting for this. Let's go'. I was nervous, but really excited as well."

Before long he'd be in the bath, wondering where he'd been going wrong – why he was falling asleep while playing, and why some

people, after a user-testing session, would answer the question about the manta ray stage by saying, "What manta ray?" He went back to first principles, playing the Game Boy version, looking for inspiration. He may have found it in the tub, but the answer lay in the driver's seat of a car.

Tetris, he realised, was defined by the opportunities it gives players to breathe. He likened it to when your car pulls away from heavy traffic, and you release a little tension; maybe look at the scenery, talk to a passenger, or fiddle with the radio. The consequences of this realisation were twofold. Firstly, the most dramatic moments in *Tetris Effect's* scenery had to trigger when players were actually able to look away from the puzzle matrix. Secondly, the scenery itself needed to be more noticeable.

He had come to believe that the brain treats games differently in VR; that, since the all-encompassing technology essentially replaces the real world entirely, the brain treats it as such, and so only focuses on what is most important at any particular time. The tools Enhance Games had devised for its games' audiovisual elements – known, naturally, as Synaesthesia Engine – had done a fine job for *Rez Infinite*. But *Tetris Effect* needed more. Enhance added two new features to the engine: physics would enable objects to move more realistically, and so move players emotionally; and morphing would give a sense of motion, of progression, and hence a sort of story.

The fatigue problem, meanwhile, was fixed by Ishihara approaching the game's structure from the perspective of someone heading out for a leisurely Sunday drive. Rather than a linear increase in game speed, as in other *Tetris* games, here it fluctuated, rising or falling in time with the music. And by breaking the main Journey mode up into sections of three or four levels, awarding an overall rank each time, Ishihara was giving players a chance to take a break, like rest stops along a highway.

Slowly things took shape, and suddenly user testing was bringing in more predictable data, though the team had to learn to dismiss feedback that was clearly subjective (someone who hates jazz, for example, is naturally not going to like the Downtown Jazz stage). But while the team set to work on fixing the little systemic problems that were being thrown up – people not understanding why the game advanced to the next stage, why it suddenly got harder, what they just got a score

Q&A

Mark MacDonald
Producer, *Tetris Effect*



The Zone mechanic only arrived late on, and you considered a multiplayer mode for a while too. Is "we'll worry about that later" a common phrase at Enhance?

Mizuguchi-san's style is very from the heart, very intuitive. If he's inspired to do something, he does it, and then we ask, "Okay, so how do we make that happen? What system does it come out on? When does it come out? How much does it cost?" A lot of places, I think, do the opposite of that: "Here's how much money we have, here's what's happening in the market today..." We make the emotional decision, and while we have to justify it to partners, or make the money work, and so on, that's what comes after.

If you could have your time with the game over again, what would you differently?

We talked about exploring online more. Is there a way for people to share this feeling they're having with other people? What people associate with *Tetris* is one-on-one Battle mode, or now with *Tetris 99*, one-on-99. And that's really cool, but it's a different type of feeling. What about something which allowed people to feel connected to the wider community in a unique way?

Area X made people cry; *Tetris Effect* brought them together. Where do you go next?

A lot of people have cried while playing this game, too. It started with Area X and I think we've got better at employing it. We're so happy when we get those reactions from people because that's exactly what we're going for. And we hope to go even further in that space. It's something we want to dive into even deeper in future, because we kind of feel like we're onto something.

bonus for and so on – something bigger was eating away at them. In fact, it had been since early in the project's life. They had still just made *Tetris*. Did they need to add something new?

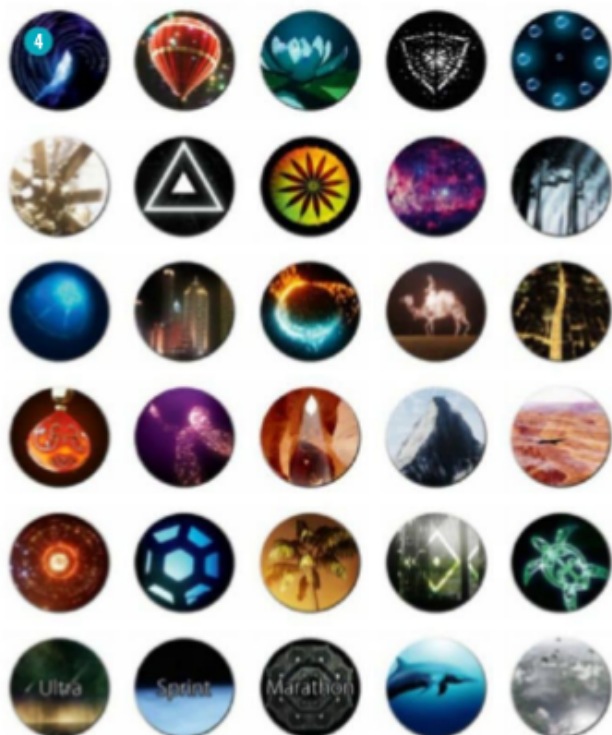
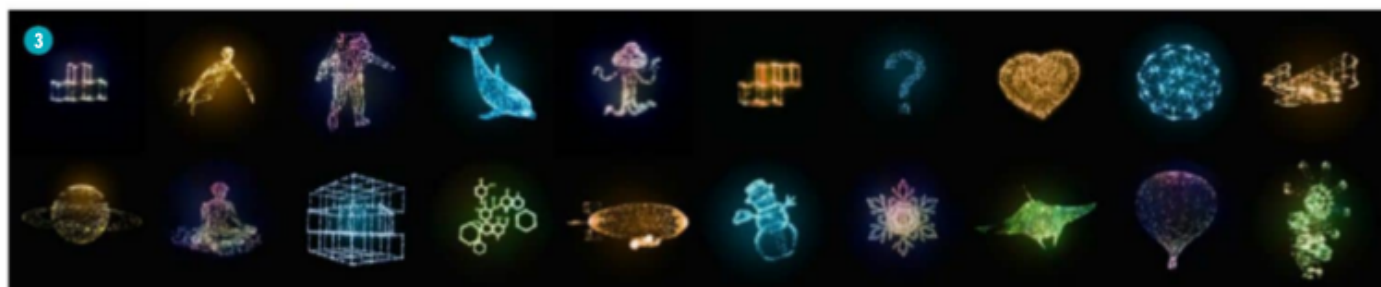
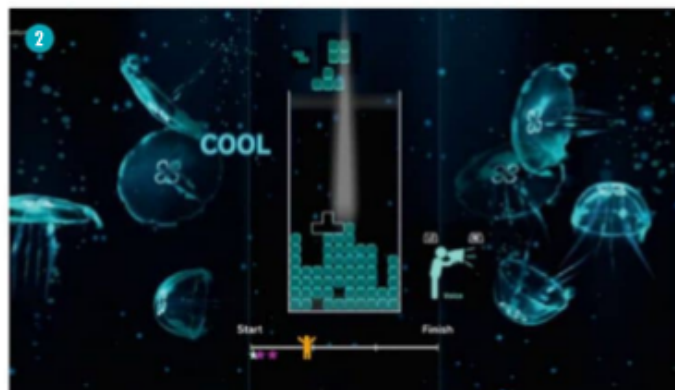
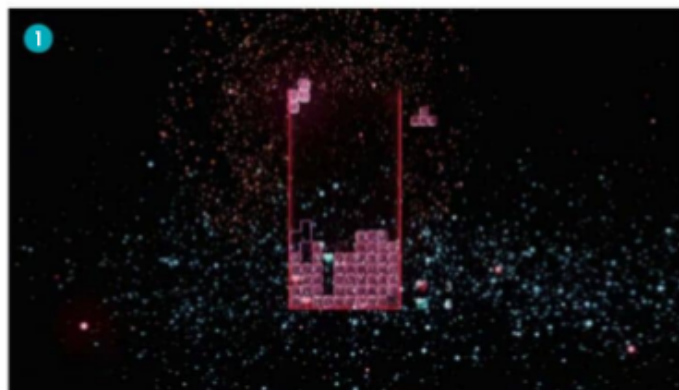
"I think we were on opposite sides of the issue, but we were actually pretty close together," MacDonald says. "I had this intuition that we needed something new. But Ishihara would point out that there hadn't been many new mechanics from other *Tetris* games that had survived, that were memorable or cool, and that was true. We'd check in every couple of months, talk about other things, and then at the end of those meetings we'd be like, 'So, how about that new mechanic? Any

thoughts on that?' But we didn't. The can was getting kicked down the road. Then it would come up again, and we'd reach another stalemate."

They experimented with time-manipulation mechanics – a slowdown move to help players navigate trickier sections, for example, and a rewind feature for when a brainfart drops a Tetromino in a terrible position. They didn't work: instead of just making *Tetris*, they were making *Tetris* with all the tension removed, and therefore much of its magic as well. "Like real life," MacDonald says, "if you take away all kinds of strife, conflict and challenge, you're left with nothing interesting at all." The eventual solution, Zone mode, was suggested by the lead programmer on the project, who wondered one day what it would be like if cleared lines no longer disappeared from the board. The result is just about perfect: different, meaningful, fun and, crucially, optional. Indeed, trophy data suggests around one in five players has never used it.

The real magic of *Tetris Effect*, however, is what it does to you. Area X, the new zone added to *Rez Infinite*, famously reduced the first press to play it to tears. *Tetris Effect* has a far more subtle, yet much more powerful, impact. It is a strangely cleansing, healing game, one that makes you feel better about the world when you take the headset off than you did when you sat down. From the opening refrain of "We're all connected" to the final stage's reassurance that "Perfect love is all around us / everything you need is waiting for you", *Tetris Effect* preaches unity at a time of division, love in an era of hate. Even if we ignore that the world was in a very different state when Ishihara sat down to make his first concept renders, the fact remains that positive emotion is not easily achieved through engineering.

"Something I kept coming back to in designing the game was the idea of a timeless message," Ishihara says. "Not following trends, or what people are reacting to right now, but looking for universal things that we as humans – regardless of race, colour, creed or culture – react to. The idea is that anyone, at any time, should be able to come back to *Tetris Effect* and still have it really resonate. In striving for that goal, maybe we helped people." Mizuguchi believes it's something only games can do. "Game mechanics and design, they're like pillars," he says. "Sound, music, art, story and so on are like decorations. But if we make really beautiful architecture, we can make magic. We can make miracles." ■



1 This prototyped alternate mode tasked you with clearing hearts from amid the blocks; when removed, each one would play a vocal sample, giving the player a degree of control over the music.

2 Another prototype video. Mizuguchi believes gameplay, audio and visuals should be of equal importance in his games, hence the long preproduction phases of Enhance's projects.

3 Many player avatars are borrowed from stages in Journey mode. They represent you in menus and the game's online component, orbiting the Earth.

4 These icons dot the level-select screen in Journey mode. It's testament to the strength of the game's visual design that so many stages can be recognisably reduced to the bare essentials.

5 Key art for the final game. During development, while known internally by the on-the-nose codename of Trip, the game was unofficially called Zen Tetris. It was abandoned because the team didn't feel it fit with the game's often frenetic pace; the word 'zen' also has connotations of old-fashionedness in Japan.

6 With each new backdrop comes a new Tetromino skin – a Tetsuya Mizuguchi calling card that calls back to PSP puzzler Lumines



STUDIO PROFILE

NO CODE

The embryonic stages of a family-run developer intent on upending expectations

By **LEWIS GORDON**



Think of a typical Glaswegian family-run business. A cutting-edge videogame studio probably isn't be too high up your list. Yet that's precisely what No Code is.

Established in 2015 by **Jon McKellan** and **Omar Khan**, the team now encompasses not only the former's brother, **Graeme McKellan**, but his own wife, Lena and her brother, Ben Hall. Oh, and Khan's mum chips in with cleaning and odd jobs around the studio. You might also think, not unreasonably, that such a cosy environment isn't the most fertile ground from which to dream up some of the most forward-thinking and unsettling videogames of the last few years – but the psychological horror of *Stories Untold* and the forthcoming sci-fi thriller *Observation* rather disprove that, too. No Code, it seems, is building a reputation off the back of confounding expectations and delivering some of the most thoughtful entertainment around in the process.

The core of the team, McKellan brothers Jon and Graeme, have known Khan since primary school. They grew up in what the trio describe as a "council-themed" village just off the north-east of Glasgow in the 1980s: working class, a smattering of houses surrounded by fields, pleasant hill views and a thunderous main road carrying commuters into the city itself. So far, so unremarkable. But the upbringing did offer them one thing: time with one another. For well over a decade, they'd play videogames at weekends and after school, whittling away hours on *Command & Conquer* and *Unreal Tournament*, while also building up an intimate familiarity with certain films. "Every Thursday for about two years we watched the *Aliens* Director's Cut," Jon recalls. "It was a special edition VHS and it had the trailer for *Alien 3* at the start – so we watched that every time as well."

The trio also played in bands together, the most recent of which, Futuro (active from 2006 to 2009) saw a slew of releases, self-directed music videos and self-booked tours up and down the country, including a show at renowned Scottish festival T In The Park. It's not difficult to trace a line from the DIY spirit of the band – not to mention the creative, communicative chemistry needed to sustain such an endeavour – through to No Code as it stands today.

Indeed, the very name No Code speaks to a process of intense collaboration that is increasingly rare in an industry where roles are more specialised than ever, particularly in larger organisations. While taking part in 2013's Global Game Jam, the team were asked to



With just 11 full-time employees, Jon McKellan hopes everyone will retain a connection to the studio's games

submit their names along with their roles. "Somebody asked, 'Who's your coder?' And we were like, 'We don't have a coder'," says Jon. "And he said to us, 'You can't make a game with no code.' Then we won best game that weekend and, ironically, the best tech award, so it kind of became the thing." The game in question – *Lub Vs Dub* – would go on to become an App Store hit, picking up a Scottish BAFTA along the way. The team mostly use a Unity plugin called Playmaker to bring their ideas to



Founded 2015

Employees 11

Key staff Jon McKellan (creative director), Graeme McKellan (lead designer), Omar Khan (audio director)

URL www.nocodestudio.com

Selected softography *Lub Vs Dub*, *Super Arc Light*, *Stories Untold*

Current projects *Observation*

method of working and, more importantly, a language of expression.

In spite of *Lub Vs Dub*'s success, No Code still didn't exist. Jon was in England – Horsham, to be exact, working on Creative Assembly's *Alien: Isolation* – having moved from Scotland when Realtime Worlds folded after *APB: All Points Bulletin* tanked. He was one of the first to join the *Isolation* team, working first as a 2D artist during preproduction before moving onto the game's user interface once development ramped up. He devised the delicious retro-futurism of its chunky interface and the decaying VHS-esque filter. "That became its calling card," he says. "It became *my* calling card." By the end

"HE SAID TO US, 'YOU CAN'T MAKE A GAME WITH NO CODE.' THEN WE WON BEST GAME THAT WEEKEND"

life. "It's a visual scripting tool which is kind of code but you're not literally coding," explains Jon. "Even now, myself, Graeme, and Omar do a lot of the visual scripting. We build some stuff that normally, in a big team, the coders would do, but we do it ourselves."

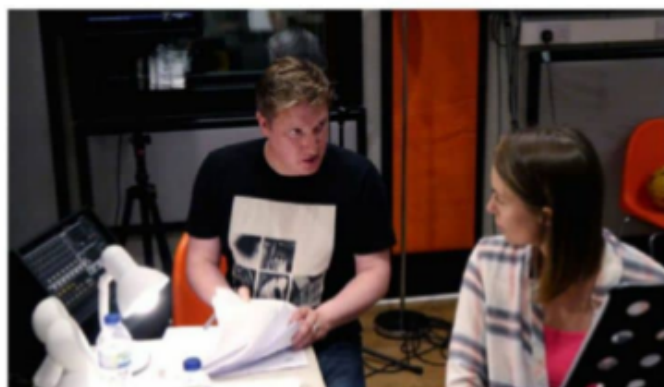
The benefits of sharing the essential tasks are manifold. Not only does it allow for exceptionally fast prototyping, without the need of programmers, but it allows the team to peek into each other's work and figure out what's happening within the blink of an eye. There's no need to unpick the idiosyncrasies of someone's code – it's laid out in easy-to-use flowcharts. "Because we're using a lot of common systems, I can read what everyone has done," Khan says. "Even though I might not have made something, I can still follow the logic." The barriers, then, between Jon (writer, designer and director), Graeme (lead designer), and Khan (audio director) are kept to a minimum, the group sharing not only a creative sensibility but a

of development, he'd assumed a senior position on the game, going on to lead a small team for the production of its widely praised DLC.

With *Alien: Isolation* wrapped up, Jon moved back to Scotland to work on *Red Dead Redemption 2*, a seemingly good fit but one that didn't work out. "It felt like I made the wrong choice when I moved there," says Jon. "I mean, Rockstar is a machine. It felt like just as I'd started to find out what I enjoyed most – a small team with an independent sensibility – I went into this massive thing. I enjoyed the work I did there but I was constantly thinking, 'That wasn't what I should have done.'"

Buoyed on by both the success of *Lub Vs Dub* and his leadership of the *Alien: Isolation* DLC team, Jon phoned Dave Jones, his old boss at Realtime Worlds – and creator of the original *Grand Theft Auto* and *Lemmings* – explaining his intention to set up a studio. Jones supplied the initial investment, Khan joined the fray and No Code was born in 2015. Its first title proper, *Super Arc Light*, a radial one-button shooter for ▶

STUDIO PROFILE



No Code's studio is currently located in Baltic Chambers, a late-19th century sandstone building in central Glasgow, but the team are already eyeing up new premises to accommodate incoming personnel as the studio, and its output, grows in future

iOS with a minimalist aesthetic, was released almost a year later in March 2016. Published by Channel 4's videogame division, All 4 Games, it picked up support from Apple, going on to sell over a million units.

The House Abandon arrived next, created in Jon's two-bed Glasgow house over the course of the 36th Ludum Dare weekend, in August 2016. The game jam's theme, ancient technology, chimed perfectly with his own nostalgia for the videogames of his youth and the ageing machines they were played on, particularly the rubber-keyed, 8bit ZX Spectrum. "I showed a picture of a text adventure to my eldest who would have been 13," says Jon. "I asked, 'Does this look ancient to you?' and he said, 'Yeah'. And I thought, 'Perfect – we can do an old-fashioned game with some modern twists.' All of our game jams prior had been 2D and I really wanted to do something 3D – something basic but manageable. I thought, 'Let's put the text adventure on a computer screen inside the game'."

At the time, No Code was waiting for the *Observation* contract with Devolver and Sony to be signed, each of the publishers impressed by a prototype created, true to form, with no code. At something of a loose end, Jon and Khan pitched *Stories Untold* to Devolver as an expanded but still tightly focused experience. "It was just in the meantime," says Khan. "It was like, 'Okay, we've got some time to kill.' *Stories Untold* was always intended to be a kind of stopgap, but what we thought was going to be a month turned into six."

Perhaps unsurprisingly for a game whose story and mechanics unfurl so gracefully, the rest of *Stories Untold* was developed in chronological order. Jon and Graeme decamped to the Scottish highlands for a holiday and

thrashed out episodes two and three of the game at the pub in the evenings. "We were just in this cabin in the forest," Jon says. "Then we'd go and scribble down ideas and try to work out how to make things connect." With the story in place, Graeme – working parttime at No Code – would make his way down to the studio after a day teaching physics at a Glasgow high school. Despite *Stories Untold*'s contracted production cycle and short two-hour run time, its creation was hugely labour-intensive. "It isn't a hugely complicated game but almost everything in it is bespoke," says Jon. "You use it once. It's not like you build a minigame in *Alien* and it gets used

artificial intelligence SAM, or Systems Administration and Maintenance.

Outside of the obvious cinematic touchstones such as 2001: A Space Odyssey and *Alien*, not to mention the less widely revered cult '90s sci-fi horror *Event Horizon*, Graeme likens *Observation* to the work of David Lynch. "I love narratives where the understanding of it is at the edge of your mind," he says. "You kind of know what it's getting at but you can't articulate it. Lynch is great at making something feel like the most important thing in the universe but it's impossible to explain why."

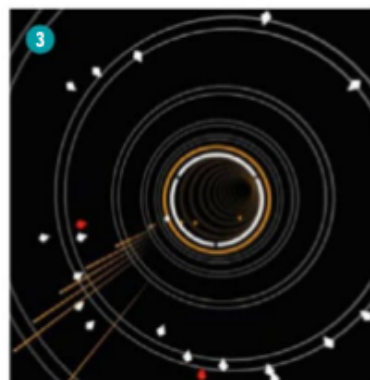
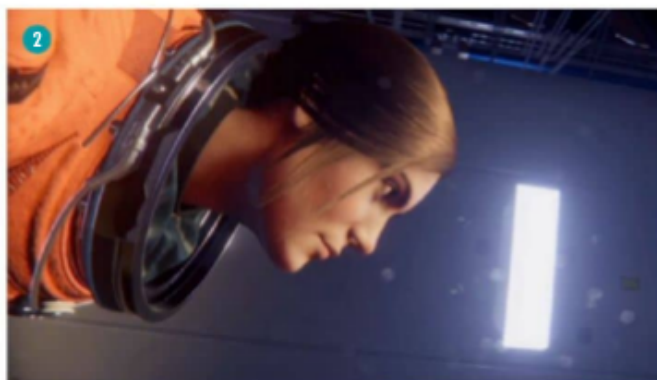
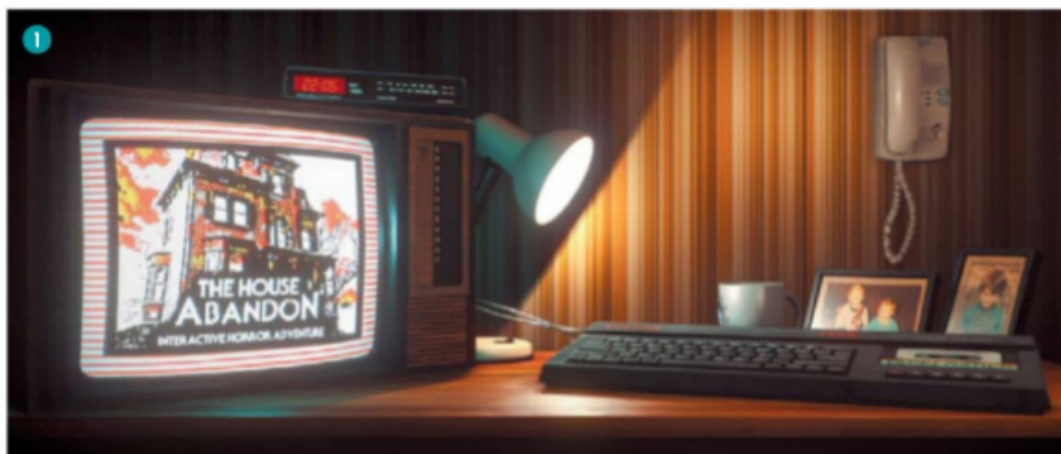
Next up, the studio might be growing again,

IT'S REFRESHING TO HEAR NO CODE COMMITTING ITSELF TO MORE INTIMATE, ALBEIT UNNERVING, EXPERIENCES

20 times throughout the game. We build a minigame and get 20 seconds out of it so it becomes weirdly expensive in terms of the time spent making this stuff."

Observation ups the ante yet again. Graeme has joined full-time as lead designer, and the team has ballooned from three to 11 – including two actual, honest-to-god coders. Fittingly, for a game that's been rattling around in Jon's brain since before the studio formed, a huge amount of love has been poured into *Observation*, from its glittering space station interiors to Khan's ominous, rumbling soundtrack and sound design. This time, their signature upending of expectations comes in the form of perspective: rather than assuming the role of a human, you are asked to inhabit the ship's

although less drastically than *Observation* required. Perhaps most importantly, No Code seems to have found a groove with its style of storytelling. With videogames increasingly interested in fantasies and gargantuan open worlds, often either shimmering science fictions or sword-and-sorcery epics, it's refreshing to hear No Code committing itself to yet more intimate, albeit unnerving, experiences. "The more relatable the theme or environment is, the more evocative it can be. The horror of *Get Out* or *Us* is far more visceral than that of *Event Horizon*, which is completely fantastical. If you want to play on people's fears or tap into something, it's got to be relatable," Jon says. "I think that's important when you're trying to tell stories that have a personal nature to them. You've got to use elements that people can latch on to." ■



1 The House Abandon would later become the very first episode of *Stories Untold*.
 2 Kezia Burrows turns in a convincing performance as Dr Emma Fisher on *Observation's* malfunctioning space station.
 3 *Super Arc Light* has sold over a million units on iOS.
 4 Jon's graphic-design roots are clear in *Observation*.
 5 *Observation's* science-fiction story is grounded by realistic presentation



PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Celeste Switch

Returning to a save file mysteriously abandoned in the final stretch, we fall quickly back in love with Matt Thorson's beguiling platformer. Despite the difficulty, it's an easy game to go back to, that sparse moveset meaning muscle memory comes rushing back. The postgame stuff might be beyond us, honestly, but rare is the game that makes failure feel this satisfying.

Cuphead Switch

We laid groundwork with the original release, figuring out each boss fight's quirks (it's worth spending a super on Beppi The Clown's annoying third phase, for instance, to get it done quickly and retain health for the fourth). We settle into a zen state, able to admire the art while going through the motions. We're past our PC progress now, though: thoughts and prayers appreciated.

Yoshi's Crafted World Switch

The best Yoshi game since *Island* is also the best platform-game onramp in years. Gently paced, more about exploration than precision jumps, and with Mellow made striking a fine balance between safety net and win button, this is a wonderful gateway drug to one of gaming's most rewarding genres. The **Edge** brood is in raptures.

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Explore the iPad
edition of **Edge** for
extra Play content

Shuffling bores

Everybody has a plan for the zombie apocalypse, because the undead's prevalence in recent popular culture has ensured we've all given the matter some thought. When the ship finally goes down and the dead rise, we all know what we'll do (providing we can safely get to that pal of ours who has access to the local hospital's secure wing). Assuming we can be bothered, anyway. We've seen all this stuff before, and know exactly how it goes.

Zombies are a handy enemy type for videogames. Strong, relentless and with no regard for their safety, they pose a serious threat. Barely sentient, their AI routines are a relative breeze. And they are a template from which numerous archetypes can be built: the tank, the rusher, the exploder and so on. So it was in *Left 4 Dead* and *The Last Of Us*; so it is this month with *World War Z* (p116) and *Days Gone* (p106). Some run, some shuffle and some sneak up on you, but none of them does anything you could call new. The broader problem is that hitching a game to such a well-travelled bandwagon invites a comparison with the genre standouts that, more often than not, will not be a flattering one. If you must do zombies, you'd better do something new with them. Sadly, neither of these games do.

Elsewhere this month we find titles that may not offer quite the same variety in enemy types, but thrive on the simplicity of what they use instead. The array of tooled-up stick men in *One Finger Death Punch 2* (p123); the slimes, skellies and demon-things of *Forager* (p118); the brawlers and bouncers of *Katana Zero* (p122) – all are familiar, but not to the extent that they breed contempt. We've already killed more clickers, boomers, creepers and so on than we can count. Gaming's a broad medium, certainly. But sometimes it can feel awfully narrow.



Days Gone

Developer/publisher SIE (Bend Studio)
Format PS4
Release Out now

Eight hundred and thirty two days gone, the menu screen tells us as we near the endgame, and boy does it feel like it. We have played longer open-world games than this, but nothing quite so aggressively drawn-out. When, after the ninth cutscene of a single mid-game mission, its title changes to "It's a long story", we can't help but laugh. There are more cinematics to come before this particular quest wraps up, by which time we've already had to follow an NPC – by bike and on foot – between waypoints more than half-a-dozen times, including a bit of meaningless busywork where we hold the Square button against a door to feel for vibrations from a turbine behind it. "Well, that's a day I'm never getting back," says protagonist Deacon St John when it's all over. Well, quite. "This world comes for you?" If only it would get a move on.

In fairness, it's not the world that's the problem. This patch of rural Oregon might be subject to some odd climatological shifts – we go from what appears to be midsummer to the depths of winter on successive days – but it's so convincingly realised you can almost smell it. It's a familiar vision, admittedly: an amalgam of popular post-apocalyptic fiction, with particularly strong hints of John Hillcoat's film adaptation of *The Road*. But it feels rich, tactile and real, never more so than when you're careering down a dirt track in lashing rain, your back wheel skidding through splattery mud as you hurry home before the sun sets. The inhabitants of the scattered survivor camps refer to it as 'the shit': it's perhaps not *that* good, but they're not far off.

Alas, what Bend Studio has chosen to fill it with is nowhere near as convincing. Take the Freakers, the ravening mutants the developer has taken pains to point out are definitely not zombies. Well, they feel like it: they might move quicker than in, say, *Resident Evil*, but they're similarly stupid, and the variants they come in are lifted from other zombie games. Alongside the regular Freakers are fast-moving Newts, who leap at you when disturbed; burly bullet-sponge Breakers that run at you, hoping to barge you over; and Screamers, whose piercing shriek attracts nearby swarms. Not that they often arrive in any great number. Those hive-minded hordes are rarely glimpsed outside scripted sequences where you're invited to crouch at a safe distance and watch them pass by, and it's a long time before you're close to being ready to take them down. When you do stumble across a large group, you need only sprint back to your bike and ride away. Ten hours later, if you're lucky, you might catch sight of another one.

In between, our hero becomes more of an odd-job man, heading out on missions at first for two outposts, then a third, then two more. Despite their different ideologies, they give out quests that fall into a small handful of archetypes. You'll need to burn out nests of Freakers, for starters, partly to allow fast-travel between

We have played longer open-world games than this, but nothing quite so aggressively drawn-out

key locations, but in theory to make nighttime journeys a little safer. The game makes a big play of how time of day affects encounters: the enemy is weaker but more numerous during the day, you're told. Yet it's pointless waiting for sundown to get your Molotov cocktails out, because you're much more likely to get attacked en route, and the difference in the numbers that pour from each nest is negligible anyway.

Meanwhile, St John is trying to work out whether his wife (missing, presumed dead) is actually still alive. Conveniently, he bumps into the very man who bundled her onto a medical chopper during the initial outbreak; this fellow is working for a mysterious organisation that likes to pick over Freaker remains, with its scientists under armed guard. Your job here amounts to crouch-walking through foliage, sitting still for a minute, throwing the odd rock to distract guards in your path, following the scientist to their new destination and sitting still for another minute. These missions are, at least, mercifully easy; your punishment for messing up is to sit through the same expository dialogue again.

Failure comes quickly if you try to be clever.

Take too wide a berth during stealth quests and you'll be warned that you're 'leaving mission zone'. These boundaries are often poorly defined, and they crop up elsewhere, too: upon taking an alternative route during a scripted chase, we're inexplicably made to restart from the previous checkpoint. Later, we're chided for failing to save a hostage, an objective about which we hadn't been forewarned. And, after attempting to flank an obvious ambush, we're sent back down the path, forced into a decidedly uneven head-on confrontation.

Still, while the odds are never exactly in your favour, encounters rarely present much of a test. If the Freakers can be forgiven their rudimentary combat techniques, there's no excuse for the other gangs, whether it's the Marauders who tend to arrive in numbers just after you've picked a building clean, or the Rippers, creepy cultists who like to carve bloody sigils into their skin. Stealth tactics are encouraged whenever you're clearing an enemy camp: you can mark opponents from range through your binoculars to make it simpler to track them, and their patrol routes are pretty basic. But once you've taken out a couple from distance (with an oil filter acting as a temporary silencer) you needn't take too much care over the rest. Melee weapons break fairly easily, but there are plenty lying around, and with one perk letting you repair them with scrap you can fix them as you go. With few enemies capable of dealing with Deacon's dodge-roll, and his melee attacks auto-targeting the nearest opponent, you can simply alternate between pressing the right trigger and bumper when surrounded. And if you do take the odd hit, a nifty crafting wheel eases matters, letting you make bandages ►





ABOVE Mechanics offer parts to improve your bike, and they'll apply decals you've gained by fully completing certain storylines. If you're short of camp credits, turning in a few bounties might just earn you enough for a refuel



MAIN Deacon will pull out his indestructible knife when his current melee weapon breaks – a high-tier skill may give it double damage, but it should only be considered a last resort. Otherwise, a spiked bat is your best bet; handily, that's the first crafting recipe you'll get. **ABOVE** These Nero facilities function as rest stops once you've found fuel for the generator and disabled the speakers that can quickly attract a crowd. It's hard to know why Deacon is comfortable sleeping there when Freakers can open the doors, mind. **LEFT** There are several flashbacks, with many of them limiting you to moving the camera. You can control Deacon in this one as he goes for a leisurely stroll with Sarah – or rather ten feet behind her, since his walking speed is locked



on the fly, time slowing as you do so, and apply them on the run. When it comes to guns, the only opponents you need worry about are the occasional sniper, and a bog-standard assault rifle usually suffices for those.

You might, however, run into trouble if you've not spent any time foraging during journeys. On the longer treks, this becomes more of a necessity — your bike needs petrol, and after a few bumps and scrapes, it'll need repairing. And so you'll stop by abandoned settlements and petrol stations, activating Deacon's version of detective vision, which highlights objects of interest as little triangles — and hoping they represent fuel cans or scrap metal and not, say, a pair of double-doors or yet another rag. Or you'll jimmy open car boots with your knife, a process that takes a few seconds of holding down the Square button in an attempt to induce tension. In practice, it's a poor man's version of *State Of Decay's* scavenging: noise simply isn't a factor, and the risk is much lower. Perhaps we should be grateful — at least we're not worrying about health and thirst meters — but these survival elements seem half-hearted, not least since you can repair and refuel at each camp.

You'll rarely be short of credits to do so either, since the majority of quests are mandatory. Sure, after a while it loses interest in demanding you burn out Freaker nests, but you're frequently required to investigate people who've gone missing on supply runs, or to fetch resources in their absence. Put it this way: we didn't expect to be asked to pick three sprigs of lavender when we started playing, much less locate some yeast. Deacon may be little more than an angry sigh made flesh, but by the time he's invited to explore a mine to gather samples of cinnabar (checking its



OREGON FAIL

One of *Days Gone's* more frustrating habits is the way it teases the idea of choices having a wider impact. An early mission to retrieve a cache of drugs leaves you with a dilemma: to which of the two available camps would you like to return them? Yet there's no tangible payoff to your pick. Likewise, those survivors trapped in their cars by wolves or Freakers. You might feel a twinge of guilt when you send them to a labour camp, but it amounts to nothing more than being able to get better kit sooner. And when there's an ideological conflict within one group, you don't get to pick sides: you'll need to complete missions for both to progress.

The scenes following the prologue establish the bleak milieu. Poor Alvarez here is in such a state that you're forced to kill her; afterwards an optional mission invites you to burn her corpse rather than leave it to the Freakers

purity each time by shaking a test tube) we begin to understand his moans about being nothing more than an errand boy. Not all of these missions are crucial, but you're tricked into thinking they are. Often you won't get the next story quest until you've already set off: the game has an irritating habit of waiting until you've left a camp before you get a message over your radio from a character who had no jobs for you 30 seconds before.

Further little irritations pile up over 60-odd hours of play. The sound mixing is bizarre: a sharp guttural sound at a rest stop convinces us to expect a Freaker attack as soon as we head outside, only for us to find it 100 yards away, growling at our bike. An incidental conversation between two NPCs interrupts a walk-and-talk with a key side character to the point where we enable subtitles — which later spoil a key reveal seconds before it happens. It's unclear why St John feels the need to say "fuel can" whenever he picks one up, nor why it sloshes so noisily as you jog along. And as we stop to rescue someone from a pack of wolves, we're perturbed to find he sounds identical to the chap we saved half an hour before, repeating the same dialogue.

What a shame. *Days Gone* is ripe with potential, but it's always in those moments before something actually happens: when you hear the rumbling of thunder heralding an impending downpour, or a distant engine letting you know trouble's on the way. But when it all kicks off, the spell is broken. This is *State Of Decay* without the stakes, *The Last Of Us* without Naughty Dog's storytelling chops, and the most generic, overlong open-world game around.

Post Script

Are the limitations of sandbox storytelling behind *Days Gone*'s narrative problems?

They say a man's got to do what a man's got to do, and it turns out Deacon St John has rather a lot on his personal to-do list. "A murdering drifter camp," he mutters during one excursion. "I've seen these bastards before, and I gotta take 'em out." Then, as we pass a group of ravens indicating a nearby Freaker nest: "I guess I'll come back and finish burning this infestation zone later." These are clumsy lines, and there's a faint desperation about how frequently they crop up, especially when we can easily find these asides on the in-game map. If it wasn't already clear from the way tattered-up side-quests are folded into the main story, it seems Bend Studio really doesn't want us to miss a single thing.

You'd think the life of a drifter would be ideally suited to the content buffet of your average open-world game. Yet Deacon St John is never really allowed to, well, drift. For someone apparently keen to remain untethered he's oddly willing to let himself become a dogsbody for the various quest givers at each camp, and his insistence that he absolutely must deal with every enemy encampment or Freaker nest he rides by leaves us convinced we've little choice in the matter, too. You could, perhaps, argue that this is a deliberate contradiction: that his inherent decency, though often buried deep, prevents him from simply riding off into the sunset and leaving everything behind. And there is, in fairness, something in his past which explains his sense of duty. Vendors and other NPCs, meanwhile, seem utterly enamoured with him, frequently telling him what a good man he is, even when his actions (and words; he gives many of his supposed allies short shrift) suggest otherwise.

It's a discrepancy that speaks to a wider lack of consistency in *Days Gone*'s storytelling, one that fatally compromises the credibility of the world far more than the occasional technical hitch. The duration of one of the shortest, easiest shootouts in the game is enough for one character to go from outright hating you to deciding you should run a camp together. You might also question St John's moral code which forbids him from letting unarmed women to come to any harm, when he's happy to shoot female marauders in the face mere moments later. Consider, too, how you can return to the watchtower you call home in the early game for supplies, long after the person responsible for getting them has moved on. How motion-sensitive gates are probably not the wisest idea in a world overrun by cannibalistic creatures — especially since they're manually operated at all of the camps. How a quirk of voice direction means St John bellows his responses to radio broadcasts from an irksome 'truther'. Or how he

later lies about his wife's name when it's tattooed in giant letters on his neck.

None of this would matter so much if we had a compelling central plot to drive things forward. But this is a three-act game without much of a first act to speak of, weighed down by an interminable second. The opening cinematic sees St John putting his critically-wounded wife, Sarah, on a helicopter, staying behind to look after biker pal Boozer (who ironically seems more sober than his hot-tempered friend) while promising to meet up with her later. Fast-forward two years, and the two are surviving as drifters in this new Freaker-infested world, but with little idea of where they're going. It might be fitting for the drifter lifestyle, but nebulous talk of "heading north" to who-knows-where-and-what isn't much to compel you to play further. The 'is she or isn't she alive' question crops up soon enough, but the constant desire to distract the player leaves Sarah's fate sidelined for hours at a time. All the while, we're left trying to get a measure of what kind of story this really is. Boozer's role in the early game seems significant, so is this a tale of male friendship in difficult circumstances? Or are we looking at a heartbroken man struggling to move on from his past? By the time we find ourselves juggling no fewer than 16 different storylines at once, it's become almost impossible to tell.

At times it feels as if Bend Studio can't decide what story it wants to tell either, and so it borrows from other, stronger sources instead. The opening unwisely evokes *The Last Of Us* — needless to say, the comparison is hardly flattering — and it's not too long before we meet what appears to be this game's Ellie substitute, a young girl for whom our gruff hero gradually grows to care. Only it's not really a gradual thing. In lieu of more thoughtful character development, *Days Gone* bludgeons you into caring about her by repeatedly subjecting her to horrific trauma. Within the space of a single scene Deacon goes from reluctant saviour to bellowing "If you've hurt her, I swear to God" to no one in particular.

It's the kind of shock tactic the game leans on rather too often. Following the least surprising betrayal in living memory, we're asked to sit through a gruesomely sadistic torture scene. And, perhaps inevitably given the sheer volume of missions you have to undertake, there are some jarring tonal shifts — notably when a corny romantic flashback follows straight on from a grisly throat-slitting episode. And by the time it botches an emotional moment to which it's seemingly been building, it's perhaps time to concede that *Days Gone*'s narrative shortcomings are more fundamental than a simple failure of structure. ■

A three-act game without much of a first act to speak of, weighed down by an interminable second



Mortal Kombat 11

We know you're partial to a bit of grinding, Netherrealm, but this isn't quite what we had in mind. The grind of buzzsaw against bone, perhaps, of boot against recently liberated spinal column against dirt – in fairness, *Mortal Kombat 11* has all the ultraviolet trimmings you'd expect. It's just that it's awfully tedious about it. In our quest to collect the 250 Hearts we need to open one – one – Shao Khan loot chest in the Krypt, Kitana's unskippable Gore-nado Fatality starts feeling routine: fan goes in, guts come out, princess whips up an offal cyclone. We must have watched it dozens of times – in fact, we know *exactly* how many times, because each Fatality performed earns you one Heart. We have 57.

Fortunately, Netherrealm has since patched *Mortal Kombat 11*'s miserable launch economy (it's three Hearts per Fatality now. Don't all applaud at once) but it hasn't managed to shake the ennui we feel while playing its latest exercise in hyperviolence. At least, after the credits have rolled on its rollicking and often oddly heartfelt campaign, in which time-manipulating villain Kronika provides narrative justification for some entertaining mirror matches (even against shoddy AI). Suffice it to say that if we were Future Johnny Cage, we'd backhand the shades off our past self, too.

But the glitter fades, and the nagging feeling persists, not least because Netherrealm has already solved some of the problems on display here in 2016's *Injustice 2*. Its singleplayer Multiverse ended each brisk match in a shower of rewards, a tantalising loop that always kept you coming back for more. Disappointingly, not only has *Mortal Kombat 11* decided to make online play by far the most viable way to collect its myriad currencies, but it's also seen fit to retain X's infuriating Krypt system. We spend our first 250 Hearts on a Shao Khan chest, which gives no indication which character's loot it will contain – we receive a few trinkets for Jacqui Briggs, who we've already written off as underpowered. The idea of grinding more Hearts makes us feel ill.

Mortal Kombat, then, is making the same mistakes as ever, presumably for the sake of being different – and sometimes at the expense of being enjoyable. What's more, it's seasoning it with extra nonsense in a bid to ensure you are kept busy. The Krypt is still pot luck, only now you're gambling much larger sums. Tower challenges are back, rebranded Towers Of Time: intended as one of the main modes, you fight your way through a series of AI opponents alone or with a friend for rewards. Some Towers, however, are ridiculous, despite another patch: even on Medium, Skarlet's character tower is a slog that forces us into cheesing it for hours.

At tougher tiers, buffs such as heat-seeking missiles add artificial difficulty in the absence of decent enemy AI (bitterest regards to whichever sadist at Netherrealm thought the Freezing Aura modifier was a good idea).

Developer Netherrealm Studios
Publisher Warner Bros Interactive Entertainment
Format PC, PS4 (tested), Switch, Xbox One
Release Out now

The series continues to undermine its smarter ideas with seditious choices. *Mortal Kombat 11* is no exception

Consumables – purchasable with real cash – offering an essential advantage feels especially grubby. Throw in the fact that you can build a loadout and have an AI character grind the tower for you, and suddenly we're asking why we should pick up the pad at all. This is a dangerous game for *Mortal Kombat 11* to be playing: annoying is bad, but pointless is even worse.

Thank goodness, then, that the act of putting fist to face is more satisfying than ever. There's been a sensible alteration to 'amplified' moves since the preview builds: instead of overly complex, bespoke inputs for each move, you now only have to press a single button for extra oomph on, say, Jade's Nitro Kick (which can be further modified in her customisation menu for a nasty side-switch teleport). Alongside the new offense/defense meter system, extending a combo then becomes a matter of strategy rather than finicky execution: burn a chunk of meter on extra damage, or hold onto some for a wakeup attack in case you're knocked to the floor?

The same goes for Fatal Blows: replacing the previous entry's X-Ray, it's a powerful, once-per-match comeback move that can be activated when you're at low health. It doesn't feel cheap, despite its short cooldown: it must be aimed and timed well, and a lengthy recovery time leaves the perpetrator wide open if it's fumbled. Krushing Blows, meanwhile, offer more flexible and damaging combo options for players willing to study how to trigger them – universal ones, such as an opponent attempting to counter a throw with the wrong input, offer a thrill as bones crumple in slo-mo.

But a closer examination of such details reveals issues. That throw-break system, for instance, is an unreadable coin flip: there's no discernible difference between the animations for a forward and back throw, and each type is countered by a different button. Why Netherrealm won't do the sensible thing and use a single one is beyond us – but then it's still building *Mortal Kombat* around a block button instead of a backwards direction input. Back when the series needed to differentiate itself from *Street Fighter*, it made a kind of sense. But it means that *Mortal Kombat* has become ever more reliant on teleporting moves to answer the lack of a cross-up game, and the teleports disrupt the projectile-focused 'zoning' so central to proceedings.

As the years go by, so the series continues to undermine its smarter ideas with seditious choices. *Mortal Kombat 11* is no exception, and the grinding of its disparate parts against one another is almost as painful as the Heart nonsense. Like the grisly cutscenes, *Mortal Kombat 11* is fun as long as you don't think too hard or look too closely at it – but that's exactly where the real joy is found in a fighting game. If *Mortal Kombat* wants to elevate itself, it's time to start overhauling the skeleton underneath all that flesh.

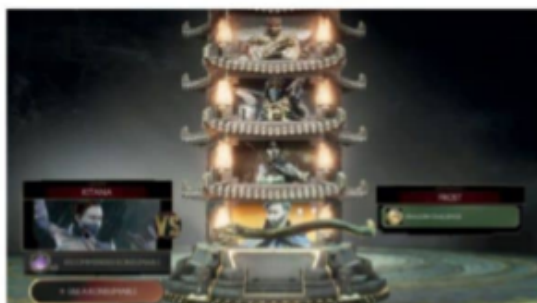




ABOVE Despite the beating he's receiving here, Liu Kang gets his dues in Story mode. His preset movesets don't offer much range beyond mid attacks, however. You can customise movesets, but you're limited to presets in ranked play.

LEFT You can also name your own custom variations, which has been a source of much hilarity on our online travels. To anyone who had to fight "Raiden 2: Electric Boogaloo": you're welcome

BELOW Fatalities are more creatively gruesome than ever, but wear thin. You'll likely move quickly onto trying to fulfil the in-fight criteria for Brutalities, which reward you with more Hearts



ABOVE Sending an AI build up an Endless Classic tower is a good way to farm Koins. While you can replenish Krypt chests, there's only so much loot, so you won't get great rewards from opening a pricey chest a second time





Characters get their own tutorials, but they're very basic. As ever nowadays, YouTube is where the real tech lies

Post Script

As the battle moves increasingly online, how do we fix the fighting-game tutorial?

Tutorials in fighting games are usually an afterthought, seemingly designed as a kind of Captcha. Can you walk forward and backward? Throw a punch? Lovely stuff – you're clearly a human, and are now free to be torn apart by frame-data mathematicians via the power of the Internet. It's maddening, especially in the online era (*MK11*'s couchplay options have been significantly reduced in favour of it: happily, the netcode has come on significantly since the series' last entry). Gone are the days when you'd get trounced by someone standing or sitting directly beside you, before turning to them and demand they teach you what buttons they're pressing to bounce your Baraka around in the corner like an ugly tennis ball.

Fighting games are tense, delicate matches of speed-chess. If we're teaching newcomers to simply take their knight and bash it around the board until the opponent's pieces clatter to the floor, they might have five seconds of fun – against a savvier foe, they'll be at a loss as to how they've been bested, and won't return to repeat the humiliation.

Points to *Mortal Kombat 11* for effort, then. Its tutorial system means well, and goes some distance towards challenging *Skullgirls* for one of the most involved digital dojos in the genre. Not that the basic lessons do much to

educate. There's the usual business of movement, blocking and throws. Then, a glimmer of hope. "Your opponents will attempt to mix low and overhead attacks to get past your defense," the tutorial explains. We expect to see something like *Skullgirls*, where we must block combo strings to prove we've mastered the concept. Instead, we can progress by blocking attacks one at a time until we total five. Then we're told to "use what [we've] learned to defeat Sub Zero", who fights like a heavily sedated bag of sausages. The lesson ends, and we've learned nothing.

In more advanced lessons, hidden among menus, explanations arrive – when to avoid projectiles and when to block them, or the damage benefits of mixing up specials – alongside two useful methods of teaching combo timing. But the first impression, which will no doubt be the only thing the majority sees, does little to prepare us for online play.

So what's the solution? There's a fine idea in *Mortal Kombat 11* locking certain rewards behind tutorial completion: you'll need to run them all if you want the Shao Khan announcer voice, and each section you clear grants ten Time Krystals (although the game's stinginess with this purchasable currency is perhaps holding players at ransom rather than encouraging a desire to learn).

Something drastic and more interactive has to happen – perhaps introducing another experienced human player in the tutorial via some kind of sherpa system, with the veteran being rewarded handsomely for taking part. We'd love to see tutorial updates as balancing changes the meta. With the advent of tech such as machine learning, maybe there's even a future in which a tutorial adapts to and commentates on fights, and you can hit a button to pause the action and be told *why* you've just been hit in the face. Indeed, there are the beginnings of this in *MK11*, with pop-ups heralding a 'punish' or a 'breakaway'.

Still, tutorials are expensive enough as it is, which is why they plummet to the bottom of devs' priority lists. But without adequate in-game tutorials, we're more likely to lose the next generation of enthusiasts. Nobody's likely to make a one-size-fits-all tutorial, every game's rules being different. One of *MK11*'s tutorials teaches us jump-in attacks, blasphemy in *Street Fighter*, and while zoning gets its due, *Mortal Kombat*'s structural issues mean 'footsies' (throwing out less risky attacks to judge space) can't be taught, as it barely exists here. One thing's certain: there's no replacement for a human sensei, and the more fighting-game tutorials can do to incorporate them, the better. ■

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SteamWorld Quest: Hand Of Gilgamech

Developer Image & Form Games
Publisher Thunderful Publishing AB
Format Switch
Release Out now

Had it got nothing else right, Image & Form's card-based RPG would be worthy of praise for making every battle count. So many games in this genre settle into a rhythm that has become wearily familiar: you steamroll a procession of grunts, accruing tiny amounts of experience across dozens of rinse-and-repeat encounters, before bumping up against a tough boss with a giant health pool at which to chip away. There are bosses here, sure, and some of them take a fair old while to kill. But even the rank and file can present a test. For once, you can't afford underestimate the underlings; rather than resorting to failsafe tactics, you need to actually *think* about your next move.

In large part, it achieves this by being strict. At times, its limitations can seem severe: a miserly three cards per turn? Only eight per character? The *SteamWorld* games are all about making complex genres accessible, but this is ridiculous. Except it really isn't. After a while, you'll have so many possible options that the choice becomes overwhelming — but it also means you have different ways and means of getting around every obstacle. Try as you might to build a balanced deck, you'll always find an opponent you scrape past by the skin of your teeth, at which point you'll know it's time to shuffle the pack. If it's relatively smooth sailing for a while (relatively being the operative word, since there are few outright easy battles in *Quest*) then it's probably because you've got the right cards for the job.

Each card falls into one of three categories: strike, upgrade or skill. The first two tend to be physical attacks or buffs, letting you store up steam pressure (abbreviated, naturally, to SP) which can be spent from your shared pool on powerful special moves. An upgrade and a strike — or two of either — on a single turn will give you enough SP for a decent skill, but the best ones require more. Occasionally, you might suck up a bit of pain for a devastating move that drains the gauge entirely: 20 hits of critical storm damage, and that miniboss that had you on the ropes is suddenly looking peaky (and, with luck, paralysed). But it's a risk: an unfortunate draw with a surfeit of skill cards, and that healing move you needed to use is no longer an option. Sure, there's a card that gives you a free cog up for three turns, and another that gives you an instant boost of three. But can you really afford to waste valuable deck space on a single-use card?

Battles, then, are about finding a balance between engineering opportunities, reacting to surprises and bending the rules, if only a little. If you choose three cards belonging to the same character, you'll automatically play a bonus fourth, its skill dependent on the weapon you have equipped. One of these lets you play an extra card on the subsequent turn, while there are others that allow you to freely swap out more than the standard limit of two if you don't get the draw

In contrast to the splendid combat, the story leans into archetypal save-the-world plotting, but that matters little



SCRAP METTLE

Limiting your party to three means leaving two out, and those absent members will earn a smaller share of experience. In theory, that encourages you to chop and change more, though it feels a little unnecessary since for the most part the encounter design forces you to mix things up anyway. Still, you're allowed to go back and replay a previous chapter at any time — which is worth doing for materials to craft or upgrade cards — and with an (admittedly costly) bit of kit you can boost experience for the weaker character to quickly bring them up to speed. When going back you can afford to be a little more cavalier — holding the trigger speeds up running movement and actions in battle once you've chosen your cards.

you're looking for. But sometimes it pays not to play three of a kind when you've got a combo opportunity. As Galleo, your tank and healer, you might aggro a foe after being granted physical immunity; play the Yojimbo card belonging to Orik, a wandering ronin you pick up on your travels, and he'll play the loyal samurai, countering anyone who attacks his master. Now imagine you've envenomed his blade, and suddenly you've dealt more damage on the enemy's turn than your own.

Orik, in fact, with his array of masks conveying a wide variety of effects, raises a cautionary tale about why you shouldn't rely on a single character, even if his deck is irresistibly good fun. At one stage, we attempt to stack the deck so our other two party members are left to build up skills for him, but we soon relinquish that strategy after one battle in which he is effectively rendered useless for several turns. A piercing attack that inflicts bleed — where every move causes you to take damage — and suddenly the deadly triple-combo we're banking on for our next turn goes out the window.

In contrast to the splendid combat, the story leans into archetypal save-the-world plotting (though there's an unexpected link to another *SteamWorld* game), but that matters little with such a characterful cast. So much is communicated visually: Copernica, a mage with a keen intellect, appears to be stroking her chin as she walks, and can whack enemies with her spell book for a pre-emptive strike. Diminutive siblings Thayne and Tarah are worn and scuffed, with one of them carrying a tremor that speaks to their troubled past. Elsewhere, there's pathos in Armilly's tale: though her thirdperson narration irritates the others, it's a sign of her long-held dream to be a knight, denied by her poor upbringing. One heartbreaking betrayal is brilliantly communicated in card form: she's given a skill that sees her launch into a fiery rage that also causes despair. There are more like this for the others, too — sifting through your deck serves as a recap of key events.

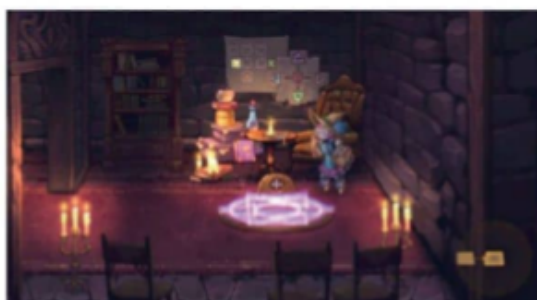
Only rarely are you reminded that Image & Form is still a fairly small studio. There's some thrifty asset reuse — although there's usually a solid narrative excuse, and the script pokes fun at itself without being too clever-clever about it, even if the fourth palette-swapped dragon you fight is maybe pushing it a bit. And one or two encounters enforce very specific strategies which fly against the freedom you're given elsewhere. Otherwise *SteamWorld Quest* gets a lot of unglamorous stuff right: it's well-paced, exquisitely balanced, challenging but scrupulously fair, doesn't outstay its welcome (despite postponing its climax more than once) and has a battle system you'll be thinking about when you're not playing. Three cards per turn? Eight per character? Finally, here's an RPG that, in every sense, leaves you wanting more.



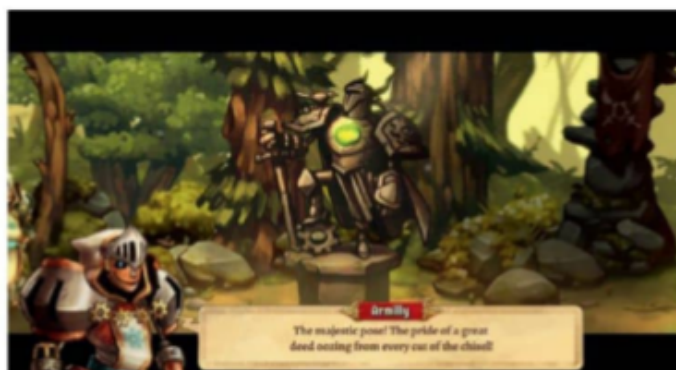
LEFT Sometimes low-level skills won't cut it, especially when facing an enemy that likes to heal itself. You can, however, inflict dread to prevent it doing that, while another of Orik's cards lets him flinch an opponent, denying them a turn.

BELOW You can save and recover HP at these Hero statues, but doing so causes enemies to respawn. It's useful if you need to grind.

MAIN After a certain point you can head to a battle colosseum for some increasingly challenging scraps (and some tasty rewards)



ABOVE Environmental features, such as these glowing teleporters, factor into some puzzles – they're fairly simplistic, but they do give you something else to think about between encounters with enemies



World War Z

When – okay, fine, if – the dead return to walk the earth, we as consumers of pop culture will only have ourselves to blame if we perish. The last decade-and-a-half of fixation on this specific end of days provides an encyclopaedic guide to survival, from hypotheses about what kills the dead (headshots, mostly, but also fire) to how to deal with the infighting among a group of survivors (headshots preferable). Like a training video for an imaginary disaster played on loop, zombie fiction has explored every eventuality and prepared us for the apocalypse.

All of which is to say, it's an extremely well-trodden path along which Saber Interactive's *World War Z* shambles. And although it carries a major cinematic IP, its developers seem much more interested in demonstrating their love for Valve's *Left 4 Dead* games. It is, after all, a fourplayer co-op shooter, albeit played in thirdperson, which throws hordes and 'specials' at you while you navigate episodic scenes from after the global pandemic turns our familiar world into one of smashed glass, police barricades and viscera. The only real nods to the book and film of the same name are incidental – places, names, and that unnerving way its zombies pile up on each other to climb sheer walls. Conceptually, it's *Left 4 Dead 3*. Stylistically and creatively, however, it's closer to *Left 4 Dead 2.1*.

The mowing down of reanimated corpses takes place across New York, Jerusalem, Tokyo and Moscow, each comprising three sequential levels. The broadness of scope offered by the source material makes for some welcome variety, with Israel's distinctive architecture creating a different atmosphere from frozen Moscow's. Suburban Tokyo is always a treat to explore, and while we've visited ruined New York City in more videogames now than we could possibly count, it feels sufficiently removed from the other locales to warrant inclusion.

It's within these locations, however, that the most profound problem with *World War Z* lies: levels are too short. They're even more noticeably lacking in spectacle, imagination or surprise. Despite each location's visual flourishes and incidental details, every mission involves the same prosaic treks from A to B. Punctuated only by stationary defence sequences like those at the end of each *Left 4 Dead* episode, they quickly begin to feel like cardboard cutouts arranged into film sets.

Granted, this isn't a genre noted for its fantastically immersive or multi-pathed environments. Fatshark's *Vermintide* series uses bewilderingly high visual fidelity to distract you from what are often straightforward slogs. *Left 4 Dead* didn't even do that. Often the design imperatives of letting four players battle huge numbers of enemies have to take priority over gently immersive environmental storytelling. But in both those cases, there's an element of randomness (the AI 'director', as

Developer Saber Interactive
Publisher Focus Home Interactive
Format PC (tested), PS4, Xbox One
Release Out now

Despite each location's visual flourishes and incidental details, every mission involves the same prosaic treks from A to B



SPECIAL DELIVERIES

Perhaps part of the reason why *World War Z* doesn't birth more anecdotes about unscripted moments and improvised heroics is its special enemies. Like nearly every other component of the game, they're cut from the Valve cloth, with 'Gasbags' functioning just like Boomers, 'Lurkers' replacing Hunters, and 'Bulls' standing in for Tanks. Even a special infected type which was left on the cutting-room floor in *Left 4 Dead* gets a turn here: the Screamer, named identically in both games, attracts more of the horde with its noise. Despite such similarities, specials never shake the dynamic up in the same way, instead surfacing while a scripted horde attack is already underway, or popping up to little effect when one character wanders off.

Valve coined it) which generates new stories every time you play. That's not the case here – one escape through the New York subway system is very much like another. Whatever special infected variants crop up, you never break stride. And because of that, your adventures conclude without any standout moments in your mind.

All that wouldn't be half as frustrating if the game didn't feel so robust mechanically. Shooting the undead feels just as it should, all heavy impacts and lolloping limbs when you pull the trigger. Those pyramid moments, when your enemies arrange themselves into the most satisfying target imaginable, are delivered gratuitously, giving everyone on the team a chance to unload their special weapons and explosives into a writhing pile of kill count. The thirdperson camera stays out of your way, and the projectile arcs offer a quick way to pop off an explosive with precision. *World War Z* has the intrinsic satisfaction of fighting off a horde down.

It also takes a stab at a class-based combat system which elevates your mechanical enjoyment just a touch through unlocks and specialisation perks. Although it doesn't commit to it deeply enough that you'd notice which class your co-op colleagues are playing, it does at least suggest how *Left 4 Dead* might be improved. An extreme class-specialisation split would be fascinating here: how might the DPS dealers have to nurture their glass cannons and medics when the hordes arrive? As it is, you're left guessing while things like med kit effects are buffed in tiny increments when you level up. There are enough of these class and weapon effects to warrant at least a few playthroughs of each scenario, alongside backstories for the 16 characters – a pleasingly diverse mix who imbue proceedings with a whiff of personality.

PvP multiplayer is another tentative step into what zombie survival might look like out of *Left 4 Dead*'s shadow. Teams of survivors run around in bespoke multiplayer maps pitted against zombies and other players at once. There's a worthwhile mode in here, and it'd be buoyed further still if *World War Z* made its classes worth caring about. The thirdperson perspective doesn't lend itself quite as well to precision twitch-shooting as it does firing indiscriminately at a wall of walking corpses, but with some clever special abilities the PvPE concept might have stolen the show.

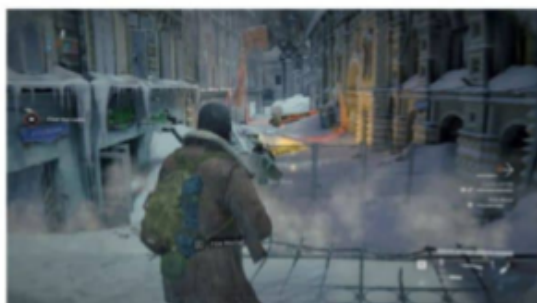
World War Z wants you to play it again and again. It plans on you growing in competency, upping the difficulty, unlocking perks and learning which classes work best together. And it presents a few spirited arguments for doing so in the form of its characters, locations and arsenal. But without having nailed its own USP – beyond those pyramids of course – you're far more likely to be reminded of how fantastic *Vermintide* and *Left 4 Dead* are, and play them instead. With better class implementation, carrying through into PvP, it might have been able to assert its own identity.



LEFT Before major standoffs against the horde, you can fortify your position by electrifying fences, laying barbed wire and the like. Unless a co-op squadmate starts the set-piece early.

MAIN The high point of any mission: unloading weapons into a writhing pyramid of flesh. The gratuitous ragdoll-ing when you toss a frag grenade in there is particularly life-affirming.

BOTTOM Among a handful of solid escort missions is this sequence in the underground freeways of Tokyo. This bus moves like a payload in *Overwatch*, so some semblance of coordination is required



ABOVE Moscow offers a snowcapped palate cleanser from the visuals of other episodes, and also provides the most memorable narrative. The plan is to release nerve gas throughout the city, survivors be damned



Forager

Developer HopFrog
Publisher Humble Bundle
Format PC (tested), Switch
Release Out now (PC), Summer (Switch)

You know the sinking feeling you get when loading up an *Animal Crossing* save for the first time in a long while? That dread in the pit of your stomach as you wander around, looking at how tall the weeds are, how widespread the mess is, and you start to tot up just how long it'll take you to clean it up? *Forager* does that to you every 30 minutes. This is a world where flora, fauna and mining outcrops spring anew at lightning pace; it's also a world you make bigger as you progress, making the constant clean-up job more onerous still.

You'll potter over to some neglected area and strip it clean – chopping down trees, harvesting ore, smashing up baddies. You'll notice the next islet over is in similar straits, and tidy that up too. By the time you're done, there'll be another island or two in much the same state over on the opposite side of the map. *Forager* presents itself, and indeed frequently feels, like the blissed-out likes of *Stardew Valley*, *Harvest Moon* and, as mentioned, *Animal Crossing*. But the pace of the game, defined as it is by the speed at which things regenerate, means that you can never truly relax.

The ever-expanding crafting menu helps you mitigate the lightning-paced circle of life, but only to a point. When it's not presenting itself as a farming game, it purports to be a clicker of sorts – asking for lots of input from you early on while promising that, later, said involvement will be automated. That the game launches in a small, native-res window suggests as much. It's telling you this is not something that necessarily needs to be played constantly, even if the spawn rates make it perfectly possible for you to do so – if you're so minded, it can be something to alt-tab in and out of in between other tasks. Indeed, automation is an important part of the game, if only to a point. Mining rods, for instance, will randomly chip away at the health bars of all the resources within its range.

Everything you do earns XP, and levelling up nets you a point to spend in a sprawling and, at its extremes, quite ridiculous, skill tree. Some are essential, such as the one that automatically adds harvested materials to your inventory, particularly once mining rods come into play; otherwise this would merely be a game of walking around picking things up. Others, particularly those in the outer reaches of the skill menu, are outlandish, if not daft. This game never feels like it needs grenades or power plants, but hey, why not?

While it's perfectly possible to unlock all possible skills in the course of a single playthrough, *Forager* invites specialisation. Acquire one skill and it unlocks two adjacent nodes, allowing you to plough a particular furrow in one of the core directions (farming, building, economics or magic) – though often one of the two new options will be in an adjacent skillset, inviting you to experiment. Essentially, building and economics are

A chill game that never quite lets you relax, in a world full of peril that never really threatens you



POP ART

Forager is the work of sole creator Mariano 'HopFrog' Cavallero, and the game's bittersweet origin story is told through a series of comic-book panels in a sub-menu, culminating in a Humble Bundle rep stumbling upon the game at a conference and signing it on the spot. Elsewhere, another comic has a go at giving *Forager*'s protagonist a backstory of sorts, though it's perhaps too serious for the cheery subject matter. Cavallero acknowledges as much: he's put himself in the game, starring as an NPC on one of the outermost islands that subjects you to a bizarre trivia quiz. We fail to correctly answer a single question. We take our consolation prize – a pile of gems – and move on, pondering what might have been.

vital – you'll need furnaces and forges to craft materials, and money to expand – while the other two are a matter of preference. At its core, though, this is a game to be played in the way you want to play it.

That is not to say, however, that it lacks rhythm beyond its core loop of farm, harvest and build. Certain islands house dungeons in the top-down *Zelda* style, elementally themed and each designed around their own mechanic. In the fire dungeon you'll need to light or extinguish torches; another has you whacking electrified blocks around to generate currents that activate switches, lowering walls between you and the next area. Late on in each, you'll unlock a weapon of the same elemental type as the dungeon, necessary to defeat the boss – whose arena is, naturally, accessed with a specific key. You can use your new toy back above ground, though your sword, upgraded as you progress using steadily more advanced crafting materials, is strong enough for just about every task.

Even if an island doesn't contain a dungeon, it will offer more than another frequently respawning cluster of materials to harvest. There are NPCs offering quests (find this rare egg with your shovel, or hand over 500 faeces; one says he doesn't like you and whacks you until you get the hint). You might need to slot four coloured gems into statues, a large chest thunking down on the island when you solve the puzzle. Craft a key and inside you'll find a permanent buff. Wonderfully, some challenges can be bypassed entirely if you've already acquired certain skills or treasures: one island contains four skull chests protected by a dozen skeletons and a mid-boss whose powers are rendered entirely moot by a charm that prevents skellies from attacking us. Each of the chests contains a spirit orb, used to boost health, stamina or damage, or instantly level up.

On it goes, and it's a delightful time: a chill game that never quite lets you relax, in a world full of peril that never really threatens you, that is filled with stuff you don't technically need but quite fancy getting because it feels like progress. It is certainly not perfect – its gamepad controls are a little fussy, often targeting the node adjacent to the one you want to hit; bosses are weirdly static until they're almost dead, at which point they suddenly kick into gear – and like every farming game and clicker in existence, you'll have to put up with the constant nagging feeling that everything you do is ultimately pointless. But this is a smart, deeply enjoyable game that feels at once like an homage to, and satire of, the many games and genres that have inspired it, yet maintains a strong sense of itself. We trudge back up to the frozen north; we haven't been up there in hours, and we doubt what awaits will be pretty. We'll soon tidy it up. It's what we do, over and over, and will continue to do for some time – in our messy little paradise that's only ever an alt-tab away.

RIGHT A skeleton mask stops these enemies from attacking you; a holy relic auto-damages them with beams of light. Gear pickups are passive and permanently applied.

BELOW Your energy bar depletes with every swing, and must be topped up by eating or you'll lose health. Early on, this means fish farming and hunting for berries; within a few hours you'll have several hundred cactus fruits in your inventory, and counting.

MAIN As your land becomes more automated, you'll be tempted to leave the game running overnight. Setting things up for an eight-hour stretch – ensuring every forge, furnace and factory will be working as close to max capacity as possible through the night – is a delight



ABOVE Every island comes with a surprise, and few are as pleasant as this family of giant radishes. They're so delighted to have you around, and blurt out "We still love you!" if you accidentally whack them with your pickaxe



Islanders

Developer/publisher GrizzlyGames
Format PC
Release Out now

Ah, and those mansions fit together so neatly, too. Like two L-shaped tetriminoes locked together in a permanent embrace – and right next to the city centre, to boot. But this new one needs moving. Shifted a little to the left and rotated to a jaunty 60-degree angle or thereabouts, it gains us five extra points. And what do you know? That leftover space looks just about enough to squeeze in a tower. Or maybe a park. But then again, that cluster of houses on the other cliff could be a more inviting spot – and we won't lose any points to the brickyard if we stick it there...

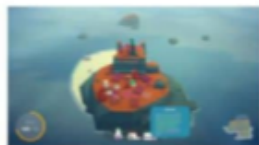
Islanders is nominally a laid-back, streamlined strategy game about building cities on procedurally generated islands. But it's a city-builder without any of that pesky infrastructure to worry about. There's no resource management to speak of. You've no need to concern yourself with how to get workers from residential area A to industrial zone B. And yet despite its self-imposed limitations, it's still a game where you have to think very carefully about location.

That's partly because space is at a premium. You can't flatten out these islands; rather you need to take natural features into account when designing your city. And progress depends on how you arrange your buildings: each comes with a points tally when placed, which can rise or fall depending on where it lies in conjunction with others. You'll need to reach a certain total to unlock one of two packs of six buildings, repeating until you eventually accumulate a score big enough to move on to a fresh challenge on a larger (and usually more topographically complex) archipelago.

The cleverly minimalistic interface immediately shows you how many points you'll get for placing a structure in a given spot, with smaller numbers next to the buildings that are influencing that score. Sawmills, for example, will gain you more points when placed close to lumberjacks and warehouses, but they'll lose some if another sawmill is nearby – which makes sense in a game about the efficient management of space. Generally, it's bound by a kind of real-world logic: hardworking masons want no truck with shamans, who are best kept away from cities and closer to areas of natural beauty, since they gain pleasure from the local flora. Not all are quite so intuitive. Mansion owners evidently aren't too enamoured when the circus comes to town; perhaps they've been ripped off one too many times by a rigged coconut shy. Regardless, the numbers help you make informed choices.

Up to a point, anyway. The effect radius varies wildly between buildings, and you can only see how far it extends when you've got one in your hand. Tiny huts come with a surprisingly large sphere of influence, making them all the more likely to take in negative points, perhaps an inevitable cost of their diminutive

Sometimes you find yourself having to curb your aesthetic instincts for the sake of your points tally



ATOLL ORDER

To a point, an island's design dictates your approach, but some creative achievements also encourage fresh tactics. Alongside fairly standard single-game and cumulative point goals, you might be asked to hit 1,000 points without having more than six buildings in your inventory – which means only opening a new pack when you've exhausted the previous one – or to make rapid progress so you can unlock two at once and have a dozen in hand. Losing 100 points in a single game is easy enough (though doing so without deliberately throwing the game is trickier) while getting more than 75 points from a single building is trickier than it sounds. For another, speed is of the essence: getting to the third island within a mere four minutes is probably the sternest test of the lot.

size that allows you to tuck them into the tightest of spaces. And as you get further and the targets to move on grow more demanding, you won't always want to go for the highest-scoring spot – or the one that lets those mansions fit together so snugly. That *Tetris* comparison is fitting: at times, you find yourself arranging the pieces you're given in such a way as to forgo points on the board in favour of long-term rewards, as you wait for the right piece to arrive and set up the equivalent of a combo. If you've reached your next score target before opening the next pack, you can consciously withhold, say, a mill, until you've laid down a cluster of fields and suddenly it's worth more than 50 points. Unlike *Tetris*, however, nothing is removed once placed. *Islanders* demands you commit to your decisions, as each building lands in place with a hefty thud. It's a sensation not unlike pressing down on a chunky Lego brick and snapping it in securely.

Generally, it pays to arrange things as neatly as possible to maximise the space, and at times *Islanders* carries a similar satisfaction to rearranging Leon's attaché case in *Resident Evil 4*. And yet sometimes it's a battle between beauty and efficiency, and you find yourself having to curb your aesthetic instincts for the sake of your points tally. Either way, your city will look good in *Islanders'* crisp geometric style, which reminded us variously of *Godus* and a sunnier, friendlier *Bad North* – to the point where we almost expected a bunch of Vikings to rock up on the shoreline once we'd finished our first island.

The procedural generation isn't quite the issue it first seems: you won't always get a kind layout, but part of the challenge comes from playing the hand you're dealt. If your choices feel restricted, then at least having a selection of two building packs gives you a chance to make the best of a bad lot. There's no point getting a sandpit, for example, if there's a single sliver of beach on the north side of the island beneath a series of rocky mesas that, at best, are going to hold a building each.

Despite its soothing ambient soundtrack, *Islanders* isn't quite as relaxing as it first seems. It's not long before the score targets become more demanding, and you find yourself dragging each building across every inch of the map, nudging the scroll wheel and shifting the mouse gently to find the precise spot for a crucial two-point swing. It can be a little pernicky about placement too, and you won't immediately know that certain buildings can't be placed on certain surfaces, though that's a mistake you'll only make once.

Otherwise, this is wonderfully absorbing stuff, as much a spatial puzzler as a strategy game. Modest but ingenious and smartly priced, *Islanders* is as engaging to tinker with as a palate cleanser between bigger games as to take seriously in pursuit of a high score – wonky mansions and all.



ABOVE There's little need to move the camera on flatter islands, but on more mountainous stages, it's worth giving it a spin: you'll find the odd potentially useful nook.

RIGHT When the small island in the bottom-right is fully opaque you can move on, but *Islanders* is happy to let you stick around until you've run out of room (or building packs). Get over 800 points on the first island and you're doing well



BELOW As buildings are placed, points become circular tokens that pour into the new structure and then back out into the tally on the bottom-left with a sound similar to collecting studs in the Lego games



ABOVE Plateaus allow you to extend your building space and can be solid point-scorers if used well. In snowy climes they resemble ice floes; in areas where there's more water than land, meanwhile, they become piers instead

Katana Zero

Katana Zero is guilty pleasure by design. It encourages you to revel in its casual brutality, then forces you to face the disturbing repercussions. The surreal neo-noir styling refuses to let you settle, giving its sword-wielding protagonist exhilarating power at the expense of an unravelling mind.

Veterans of *Hotline Miami* will recognise the recipe, starting with the simultaneously lurid and grimy style. The detail in the pixel art is striking and suggests a labour of love, albeit one with a sadistic streak. The bass-heavy dance tracks that accompany each mission instil your murderous exploits with hedonistic euphoria, contrasting perfectly with the crunchy impact noises that comprise the spot effects.

Its rhythm of play is familiar, too, with a focus on short bursts of precision violence. Often you're the victim, as enemies attack mercilessly and a single hit will take you down. But they're also predictable and checkpoints are generous, so each failure helps you anticipate their movements. Most importantly, you're always only a few well-timed button presses from reducing squads of goons to mush. A typical sequence might see you burst through a door (flattening the guard behind it), roll forward under a shotgun blast to slice up

The environment offers various opportunities for improvised killing, providing things such as a range of throwable objects and security systems that can prove as deadly to the enemy as they can to you

Developer Askisoft
Publisher Devolver Digital
Format PC, Switch (tested)
Release Out now



MAN IN THE MIRROR

Katana Zero neatly reflects on the consequences of player behaviour, by keeping our actions and powers embedded in the game's fiction. Gameplay staples such as slowing time and reliving moments over and over come from a drug with highly debilitating side-effects and withdrawal symptoms. Skipping conversations means constantly interrupting your interlocutor, who then reacts to your aggressive approach. Even the body counts caused by your exploits are registered by news reports at the end of each day.

the gunman, pick up and throw a bottle to execute an onrushing knife-wielder, then enter slow motion to deflect an incoming bullet back at its sender. Once it becomes instinctive, every success is a glorious thrill.

A disorienting narrative then rubs against the clarity of the action. At the start, you know nothing about your samurai avatar or the forces tasking him with his murderous assignments. And even as events unfold, a cast of freakish psychopaths and the character's own fragile mental state ensure you never know what's real. Hallucinations, flashbacks and nightmares work proficiently to create a feverish atmosphere.

If the twists are well-executed, however, they're also overbearing, as the story hogs too much screen time. In the early stages, where missions are short, the intrigue outweighs the fun. By the time the levels become substantial enough for you to express yourself and build a sustained flow, there's not much left. The volatility of the plot introduces variety, with a couple of notable sequences that switch up your playstyle. But overall the stop-start tempo leaves a sense of untapped potential.

Katana Zero wants us to face a truth: that we kill not for some noble cause or because we have no choice, but because we enjoy it. Yet it doesn't escalate quickly enough for us to fully unleash and confront these dark desires. The killing is enjoyable, but we'd have happily done much more of it.

7



One Finger Death Punch 2

That title, for all its evocative snappiness, is a little misleading. First, if you're using a controller, this should really be called *One Thumb Death Punch*; if you're on a mouse, it's a two-finger gig. Moreover, you fight the endless onslaught of bad-guy stickmen with far more than your fists, or even your feet. There are weapons to swing, shuriken to throw, arrows to fire and bullets to deflect, to name a few. Okay, *One Thumb Or Two Finger Death Punch Swing Throw Fire Deflect 2* doesn't quite have the same snappy ring to it. But look, names are important.

The real misnomer, though, is the implication that things die in one hit. Sure, the grey-hued basic enemies do, but they're a pushover, walking from left or right, a tap of the requisite button as they enter your attack range dispatching them immediately. But the *real* enemies are colour-coded, and require multiple inputs to defeat. It begins with the greens, who need two quick hits in the same direction, and blues, who dodge through your first blow to the other side. The complexity ramps up dramatically, and memorising the colour chart – red means four quick hits, yellow means towards-away-towards, and so on – is the key to success. Brawlers and bosses, meanwhile, have unique,

The chevrons at your feet show when an enemy is in range – a miss not only leaves you open to attacks for a spell, but also harms your rating. Still, the scoring system is generous, with five-star ratings within easy reach

Developer/publisher
Silver Dollar Games
Format PC
Release Out now



ALT TABBY

Of all the ancillary modes, Survival is the headline act: split into multiple tiers, once you've reached a stage you can restart from there on your next go, to spare skilled players the drudgery of the easier levels. Elsewhere, there's the Gauntlet, a sort of singleplayer boardgame that must be completed with a single health bar, and a co-op mode. We don't spend long in No Luca mode, but it's worth seeing, the game dropping you into Survival mode then occluding the screen with a large render of a cat, flicks of the mouse shooing it away briefly.

randomly generated patterns that scroll down the screen like a *Guitar Hero* note chart.

All this applied to the first game, of course, and while the five intervening years of work have spawned a sequel with what appears to be a kitchen-sink approach – more weapons, a faster game speed, more enemies per level and so on – this is a refined, keenly balanced game. While developer Silver Dollar Games insists when you first boot up the game that it is meant “to be played in bursts”, it's terrifically hard to put down. The animation of its stickmen characters is fabulous, there's a zen-like flow to proceedings despite the lightning pace, and bursts of slow-mo strengthen the sense of you being an unbeatable kung-fu master while letting you catch your breath. This is a deeply silly game, that much is certain. Yet it is also terrifically smart.

Still, you'll have to walk away at some point. It's a generous game, with over 400 levels in the main campaign, and a host of extra modes (see Alt Tabby). But you'll certainly be back. Like the best action games, *One Finger Death Punch 2*'s rhythm gets right under your skin; unlike so many of its apparent genre peers, however, it doesn't insist that you essentially learn a new language to master it. It asks a simple question – do you hit left, or right, or nothing at all? – and lets its magic unfurl from there. Sensibly expanded and gently refined, this is textbook sequel-making.

8





Invisible Inc.

How an indie spy game made turn-based tactics relentlessly exciting

By JON BAILES

Developer/publisher Klei Entertainment Format Mac, PC, PS4 Release 2015

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Cleverly, *Invisible Inc* is a balance of contrasts, a yin-yang structure of opposing forces that combine in harmony. As a turn-based strategy game, it wants you to take as long as you need to make your decisions, yet also demands precision timing. It wants to retain an element of risk in every act, but removes the genre's characteristic percentages and dice rolls. It wants you to have all the info you need to make your next move, while ensuring every mission is an unknowable challenge. It wants Roguelike replayability, without the brevity or abruptness of most Roguelike campaigns.

The foundation for all this is a focus on stealth. *Invisible*, a hi-tech private espionage outfit in the late 21st century, finds itself hunted by a group of powerful companies. You control its remaining agents as they infiltrate a series of corporate facilities to acquire info, money and equipment. Keep surviving and gathering resources long enough and you get a chance to enter the enemy's HQ and take their systems offline. Until then, you spend your time sneaking around offices, labs and bank vaults, avoiding guard patrols and hacking security systems to meet various objectives.

The first contrast is between the familiar and the new. You start with two characters (you can rescue further operatives along the way) whose movements around grid-based locations are governed by AP, or action points. Following basic stealth protocols you stay in cover, look ahead before you advance and only engage guards as a last resort. But there's already another crucial resource to consider: power. You won't get far unless you remotely disable security cameras, drones and laser grids, or access locked workstations and safes. And you can't do that if you don't maintain your power supply by activating replenishment programs or leeching from onsite terminals.

When it comes to the rules and flow of play, *Invisible Inc* revolves around simultaneous extremes of transparency and opacity, or information that is either remarkably abundant or completely absent. First there's what you don't know. When

you start one of the procedurally generated missions, the facility's layout is a mystery. You teleport into an empty square room with one or more doors; beyond that, somewhere there's your main objective and somewhere there's the exit. Guards could be anywhere, either about to walk in on you or patrolling deeper into the complex. You'll have to figure it all out as you move.

As for what you do know, the rule is that once you can see something, intel on it is instant and comprehensive. This is a carryover from Klei Entertainment's previous game, *Mark Of The Ninja*, where line of sight immediately clarifies the status of objects and enemies. Here, in a turn-based world, the concept goes a step further. If a guard is visible, you can read about any armour or special abilities he has, and perceive his exact cone of vision. Use an action point and you can even check the path of his next move. With this knowledge, your fragile but resourceful characters can assume control. Walk through a guard's peripheral vision on your way to cover, for example, and his attention will turn to that spot, giving you a window to sneak up and rifle through his pockets or escape unseen.

The simple and predictable nature of the AI is part of the game's drive to eliminate ambiguity. Even combat, when it does occur, is strictly binary. Either you have a weapon that can knock out or kill a particular guard or you don't, and if you attack the result is guaranteed. You never have to second-guess what the enemy will do and you never have to think about probabilities. You merely have to choose from the many possibilities laid out in front of you. Surprises only occur when you blunder forward blindly, or fail to consider what you've been told.

This absolute transparency, coupled with the contemplative nature of turn-based play, suggests cool, methodical advancement. But again that's only the half of it. The other half is urgency, pressure and panic, and it mostly comes from a single cause: the alarm level. The big twist in *Invisible Inc* is that while you arrive in each facility undetected, the enemy security network becomes more alert to your presence after every turn, and introduces new threats at certain thresholds — extra cameras, increased firewalls, more guards. Also, any time you get spotted, hack a booby-trapped system or use lethal ▶

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force, the level jumps up even more. The longer you hang around and the more mistakes you make, the harder it is to get anything done.

The most precious commodity thus isn't AP or power, but turns themselves. While you don't have to worry whether or not an action will succeed, you must consider its efficiency. Any decision can have a vital fallout in terms of time that will alter how the mission unfolds. Do you split your team up to cover more ground, or keep them together to gang up on threats? Do you spend valuable turns sneaking around a guard, or knock him out? If you knock him out, do you drag him with you and keep him pinned down, or rush on knowing he'll soon recover and start searching for you? Do you use a large chunk of power to neutralise a camera instantly, or conserve some and do it



necessary to extract maximum gains from each mission. But as firewalls increase and the guards close in, there's a point where it's smarter to cut and run.

Perhaps you have an agent crouched in a dead end, far from the exit, waiting to loot a well-protected safe. You need your power to recharge a little more to hack the lock, yet every turn you stay put the facility bolsters its defences, and your escape route becomes

Colour is also a balance of contrasts, with the muted palette of locations working to highlight the game's visual information

WHILE YOU DON'T HAVE TO WORRY WHETHER AN ACTION WILL SUCCEED, YOU MUST CONSIDER ITS EFFICIENCY

more gradually? Do you hack a safe or facility map protected by a daemon program that could disrupt your own systems? In each case, your worst enemy might be indecisiveness, but you can't afford to be inflexible either, as conditions are in constant flux.

Choosing when to do something often becomes as important as choosing what to do, especially towards the end of a mission. The only essential requirement to keep the game alive is to reach the exit with at least one character, but if you're going to survive long-term and prepare sufficiently for the challenging endgame, it's best to get everyone out, complete your objective and steal plenty of loot. The temptation, then, is always to look in every room and empty every safe, risking staying longer than

increasingly deadly. Maybe the rest of your squad is already at the exit, caught between hanging around to help the straggler or getting out now. Having come this far, is it worth another couple of turns to open that safe, or will it ruin everything? Few games make doing nothing feel so daring.

Crucially, the balance in *Invisible Inc* between stasis and timing, knowledge and ignorance, predictability and risk, is so fine that almost every mission escalates with the suspense of a good heist movie. They all play out differently, due to the random layouts. A large room with a concentration of intersecting patrols is a different proposition to a series of small rooms with stationary guards, for example. Or simple factors such as the position of the exit in relation to the main objective can dramatically change the



A quick switch to Hacking mode is useful to view the complex discovered so far, and its computerised systems



BIG SPENDER

Gathering credits is essential for increasing characters' stats, as well as purchasing weapons, gadgets, cybernetic augments and additional hacking programs from vending machines within facilities. Ensuring you've got all your angles covered for the final missions is tricky, and you'll rarely have enough to buy everything you need. At the very least, you'll want weapons and augments that give your attacks armour-piercing capabilities, and a variety of hacking protocols to gather power and take down firewalls in short order. A range of rechargeable items also help. With any luck, you may even get to grab a couple of cloaking devices, although you'll then need to put money into developing your agents to use them. Whatever you decide, you may as well spend it all.

Opening the lockers in a vault is bound to draw attention. Be prepared to grab the loot and run before backup arrives



route you have to navigate. But since you'll try to extract maximum resources regardless, you consistently push to the limit, and invariably end up running for the exit with half-a-dozen enemies homing in on your position.

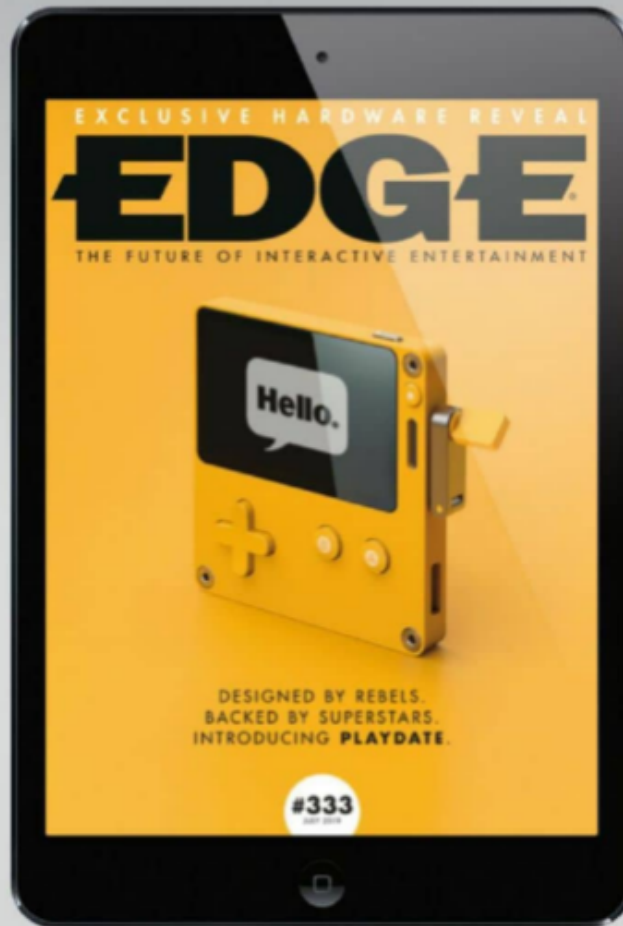
These hair's-breadth victories reflect the game's final congruent dualism: the combination of Roguelike structure with the feel of a conventional one-and-done adventure. By default it teaches you how to play through its Beginner difficulty, and you could easily finish the six-hour campaign on your first attempt. Klei's gamble is that you'll want to repeat the process again and again, each time ratcheting up the challenge and going deeper into the tactical intricacies. As you do, you'll unlock different starting characters and hacking programs, each of which brings its own unique opportunities

and challenges. You won't see anything drastically different in the missions themselves (although a substantial DLC package does change things up), but experimenting with different parameters keeps the experience endlessly fresh.

The game's use of permadeath is also carefully tempered, even when you get to the highly taxing Expert and Expert Plus difficulty levels. Being spotted is a problem, but there's usually a way out. And because you have multiple agents at your disposal, losing one isn't the end of the world. If a character is taken down, you may be able to resuscitate them or drag them to the exit, once the coast clears. Or, if all else fails, there's a limited-use rewind feature that enables you to take whole turns again. Sometimes you lose everyone nonetheless, and it can be hard to take when you're close to the end of a run, but at least permadeath isn't sudden death. You always have time to weigh up your options, experiment with the game's systems, and fashion last-ditch plans.

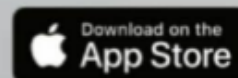
When you do succeed, perhaps inevitably it's a matter of walking a tightrope between opposites — action and inaction, attack and defence, spending and saving, safety and risk. Every decision is potentially important, and victory is rarely so emphatic that it couldn't have turned to defeat. Somehow this feels like a reflection of the game's design. *Invisible Inc* never asks anything of you that it hasn't already done itself. ■

The most efficient and discreet form of attack is ambush. Just hide behind cover and grab a guard as he walks past

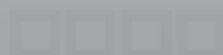


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THE LONG GAME

A progress report on the games we just can't quit



Captain Toad: Treasure Tracker

Developer Nintendo EPD Publisher Nintendo Format 3DS, Switch, Wii U Release 2015

Nintendo has developed a colour code to help co-op *Captain Toad* players tell who's controlling the camera. If player one is steering the lens, the screen is outlined in sky blue; when player two takes over, it's pastel pink. But the rage that both players feel during the opening minutes of the game's new DLC episode is a violent red.

Yes, it's frustrating to wrestle for the best view of the tiny, dioramic levels of *Treasure Tracker*. But it's worth it, and the fact that it's an issue at all is testament to how far Nintendo has been willing to experiment with the 3D Mario games. *Super Mario 64*, recipient of the very first **Edge** 10, is one of a handful of platformers from its era with a dynamic camera still tolerable today. That's because it was the first to nail the paradigm — 3D games since have simply copied or iterated on its model.

In that context it's all the more striking to play *Captain Toad: Treasure Tracker*, a peculiar evolution of the Wii U's *Super Mario 3D World* that eschews its parent's dynamic camera. Here your control of the view is absolute, and necessarily so. This is a game in which you explore the level not by moving around in it, but by looking, turning the level over like a snowglobe in your hands.

That's an idea accentuated by the power of your Joy-Con, not just as a tool to steer your Toad through the world, but as a pointer — one which can highlight hidden coins, blow up POW blocks with a touch, or tickle Goombas into submission. Once a level is completed, the pointer becomes your primary tool in the search for Pixel Toad, a challenge in which you play the level again, succeeding by spotting and clicking on the character graffitied somewhere on the map.

The action is all in the observation, Captain Toad's role merely to trundle to a better position to turn the camera, or pull a lever to expose a hidden part of the level to examination. It's quite a thing to relegate your protagonist in this way, but then Captain Toad was never really the star of his own game — rather those intricate marvels, the miniature scenes he navigates.

The standout stage introduced in *Treasure Tracker*'s new DLC looks and functions exactly like a ball-in-the-maze puzzle. Suspended on its side, the entire level spins like a hamster wheel as you run through it, dropping you between floors in search of crowns and mushrooms. It's a design that hammers home a point the game's manual camera has been making all along: you're not entering a world, but playing with a toy. Now, is there anything more Nintendo than that? ■

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